# NAVAL AVIATION NEWS

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# NAVAL AVIATION NEWS

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COVERS — Front: Art Director Charles C. Cooney rendered this striking Diamond Anniversary logo to commemorate *Naval Aviation News*' 75 years of publication in December. Back: Three VFA-136 FA-18C *Hornets* fly in echelon (photo by Cdr. John Leenhouts).



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By RAdm. Riley D. Mixson
Director, Air Warfare

# Naval Air: Projecting Power

There are a lot of changes taking place in the world...and most of them have impacted the military in one way or another. As we face the post-cold war era, the total implementation of Goldwater-Nichols, and the fiscal realities of the future, we have a lot of challenges on our plate. To face the requirement issue head-on, OPNAV has recently reorganized to streamline the assessment process by which decisions are made in the allocation of scare resources. Emphasis is on warfare areas vice community sponsorship. My title has changed to Director, Air Warfare (N88), working for VAdm. Owens (N8, formerly OP-08). While we still have the care and feeding of naval aircraft and their associated weapons, we in N88 have an additional responsibility – assessing and prioritizing joint strike and power projection requirements. We're using the fleet, through the Type Commander organization, to help us in the assessment process.

I believe that current operational expertise is extremely important as we neck down to the essential warfighting requirements. Using that expertise in conjunction with the efforts of my superb staff, the Marine Aviation staff, and Naval Air Systems Command, we are buying smarter (and joint), stretching the inventory, enhancing multi-mission capabilities, and necking down and integrating programs and forces across the board. One theme in N88 is at the forefront of our decision process. That theme is power projection.

It is important to remember that during the past 30 years we were involved in Vietnam, Grenada, Panama, Lebanon, *Earnest Will* escort operations in the Persian Gulf, Libya, *Desert Shield/Desert Storm*, *Provide Comfort*, and now *Southern Watch* over Iraq and *Provide Promise* off Yugoslavia. With the exception of the Cuban Missile Crisis, not once did my generation of Naval Aviators experience a direct face-off against the Soviets. In other words, the kinds of threats that we have fought in the past, if anything, are proliferating. That's an important point because in all of the conflicts we have been engaged in since and including WWII, one capability has remained predominant and preeminent, and that is power projected from the carrier battle group to shore.

In Naval Aviation that capability to project power is our core competency. It is that which separates us from the other navies of the world.

The Navy's white paper entitled "From the Sea" encapsulates the vision of our future Navy/Marine Corps power projection role. It emphasizes the capability to project power ashore with the emphasis on littoral warfare. The application of power means bombs, missiles, shells, bullets, and bayonets from the sea to shore. It means we need multi-mission-capable platforms that can perform strategic strike missions, as well as battlefield interdiction and close air support for our Marines and other ground forces, while at the same time maintaining air superiority and sea control. Our mission has become more complex and requires that we sort, track, identify and, if necessary, attack within some very confined battle spaces.

As I see it, the focus for Naval Aviation into the 21st century is to maintain a capability to project power within ever tightening resources. The four top Naval Aviation priorities are F/A-18E/F, AX, CVN-76, and, for the Marine Corps, an as yet unfunded new medium lift capability. To generate "cash flow", we are working hard with Naval Air Systems Command through VAdm. Bowes' Health of Naval Aviation (HONA) program to reduce unnecessary expenditures and to extend the service life of those aircraft that will "bridge the gap" into the next century.

The 102nd Congress, like those previous, demonstrated its support for the Naval Aviation Plan and provided us with most of the F/A-18C/Ds we requested, $943 million for development of the F/A-18E/F, development funds for the AX, advanced procurement for CVN-76, funds for 20 CH/MH-53s, 12 SH-60Bs, 9 SH-60Fs, and 7 HH-60Hs, $755 million for V-22, funds to keep the AV-8B fleet modernized, E-2C modernization money and finally funds to accomplish the remanufacture of three EA-6B ADVCAP. Our weapons programs are also on track and funded.

I remain an optimist with respect to the future of Naval Aviation. The assessment process I mentioned earlier is showing the way to conserve scarce resources while maintaining a technologically superior warfighting capability. We in Washington, working with the Type Commanders and Fleet Commanders-in-Chief, will buy you the right aircraft and weapons systems to get the job done right. Your job in the squadrons is to train to fight and win. Keep your enthusiasm high, continue to press, and fly safely. Rest assured all of us in the Navy are extremely proud of you and your contributions to our national security. You are where the rubber meets the road. You're the point of the spear. You are America's heroes. Press on! ■

CDR "Lifes" Leenhouts

**An FA-18C from the VFA-136 Knighthawks over the Pentagon in June 1992.**

Osborn

## Holy Helos!


It began as a "fun day" working offshore with a special ops team stationed at the nearby amphibious base. The CH-46 *Sea Knight* crew flew a few passes of "limp duck," got everyone qualified in "fastrope," and carried the crew around the field a couple of times on the SPIE (Special Insertion Extraction) rig. All hands were satisfied with the day's evolution and as the special ops personnel secured, the helo departed the field for the hotpit back at home base.

While in the hotpit, the helo was summoned for another mission because the other helo experienced maintenance problems. The *Sea Knight* was thus assigned to fly overwater paradrops involving the same group which they had worked with earlier.

NOTAMS (notice to airmen) had been issued to secure the DZ (drop zone). Because of a delay caused by the civilian tower which controlled the area, the CH-46 arrived at the base with only an hour of fuel onboard. The crew wasn't overly concerned because the overwater DZ was only five minutes away. The jumpmaster gave a thorough brief and the jumpers loaded onto the *Sea Knight*.

With 40 minutes of fuel onboard, the helo took off and proceeded to the DZ.


The jumpers were to leap out at 1,500 feet after several passes over the recovery boats to drop streamers and check the winds. On the first pass, an H-53 *Sea Stallion* flew directly beneath the CH-46. On the second pass, the crew successfully dropped wind streamers. The third pass was uneventful and the jumpers were given the one-minute warning.

The pilot turned onto a final approach course and lowered the ramp. All was in order: winds were good, jumpers were standing by, and the recovery boats were on station. The countdown was under way. Five, four, three, two...

Suddenly, the pilot ordered, "Abort the jump! Abort!"

He had sighted an H-2 *Seasprite* directly below the *Sea Knight*. The CH-46 pilot began the turn for yet another pass but the H-2, unintentionally, turned with the *Sea Knight*, matching the track of the CH-46 for two more passes.

Recognizing his low fuel status, the *Sea Knight* pilot bingoed for more fuel. After a quick refueling, the aircraft returned to the DZ but the recovery boats had secured for the day. The mission was scrubbed.

*Gramps thanks HC-6's Lt. Grady Banister for this submssion.*

**Grampaw Pettibone says:**

**NOTAMS will never make the best seller list. But they could be the most important thing a Naval Aviator ever reads – after NATOPS (Naval Air Training and Operating Procedures Standardization).**

**The Sea Knight pilot believed that neither the Sea Stallion nor the Seasprite – who surely didn't read the NOTAMS – flew under his aircraft on purpose. They likely didn't even know the CH-46 was above them.**

**The mere thought of a parachutist descending helplessly into the rotor blades of a helicopter – a catastrophe for both the individual and the helo – is indeed horrifying.**

**Lesson: Read and heed those NOTAMS!**

## Formation Folly


A pair of FA-18C *Hornets* were on a simulated air-to-ground ordnance delivery mission designed to practice utilization of the AN/ASQ-173 strike camera. Established in the overwater working area, the wingman – or "camera" aircraft – set his barometric autopilot hold function for 23,200 feet and advised lead that he was ready to take pictures. Maintaining 22,900 feet, lead manuevered aft of, and under, the wingman and while maneuvering, directed the wingman to start and stop the picture sequence. Lead held a constant altitude throughout this pass and cleared to the left front of the wingman.

The wingman transmitted, "Let's try again, a little closer." Lead moved aft, maintaining 22,900 feet. The wingman radioed that he was setting his barometric hold function for 23,150 feet for this second pass. This transmission was not acknowledged by lead.

Lead then assumed position aft and below the camera aircraft, with step-down of 20 feet, and directed the picture sequence to begin. Lead's centerline was aligned with the left engine of the wingman. Lead maneuvered so that he was looking aft over his right shoulder at the second plane and judged that the wingman's radome was close to his (lead's) right vertical tail. (The wingman last saw lead when he moved aft to execute the second run.)

Next, lead tried to clear away from the camera plane. The *Hornets* collided. In short order, the wingman heard an auditory tone, the master caution light came on, and his FA-18's velocity vector dropped off. He felt the nose falling and applied left stick but got no response. There was a loud noise, a rush of air, and buffet. Lead experienced airframe buffet similar to jet wash as he moved from under the camera aircraft.

Lead manuevered to join on the descending wingman who recovered his *Hornet* at 9,000 feet. The wingman's canopy, radome, and radar antenna were gone, along with the pilot's helmet and oxygen mask. He was being sprayed by a sticky fluid emanating from above and below the instrument panel. He headed for home base. He was unable to read instruments except in short bursts after wiping the glass clear of fluid.

Other caution lights illuminated and subsequently the left engine failed. The wingman motioned lead to stay clear and a moment later, the airfield in sight, the wingman's *Hornet* began to fishtail. He tried emergency gear extension after the normal system failed to function. At actuation, the pilot was blasted by air and hydraulic fluid from the cockpit floor area.

Uncontrollable, the *Hornet* was now at 180 knots and 800 feet. With the left wing down 30 degrees and the ocean below him, the wingman ejected. The station search and rescue helo was on the scene quickly and recovered the pilot, who was injured but survived. Lead landed uneventfully.

**Grampaw Pettibone says:**

**Gol dang it! These fellas – both seasoned flight leaders – shoulda gone back to basics. Basic airwork, that is. A seemingly simple formation hop turned into a midair nightmare.**

**They briefed the flight alright, but investigators said they left out "conduct of the air-to-air picture-taking sequence, the number of sequences planned, variations in aircraft separation, geographic location of maneuvers, directive commentary during manuevers, formation lead changes, responsibility to maintain center assigned altitudes, and closest point of approach in formation."**

**Lead put himself in a tough spot for the picture taking. He didn't have familiar cues to help orient his position, manuevering as he did. He misjudged his distance from number two and the Hornets smacked into each other.**

**One endorser of the mishap report wrote, "Two experienced aviators ran into each other while flying the simplest formation flight."**

**An insufficient briefing and questionable basic air work turned "simple" into "complex" and cost the inventory one fighter bomber.**

# Naval Air Extends Security and Helping Hand

In a recent two-month period, the Navy and Marine Corps, spearheaded by their Naval Aviation elements, responded to three international crises abroad and three natural disasters at home, extending security to beleaguered citizens in war-torn countries and a helping hand to American communities devastated by storms. The events of that period displayed many times over the responsiveness of forward-deployed naval forces and the flexibility of naval forces to meet national needs.

PH1 Stager

**VFA-195's AO3 Parish and AOAN Kulbe wheel Sidewinder missiles across the flight deck of Independence (CV-62) prior to loading them aboard an FA-18C Hornet preparing to fly missions over Iraq in support of Operation Southern Watch.**

## Provide Promise

On July 24, 1992, *Saratoga* (CV-60) became the first U.S. aircraft carrier ever to conduct sustained flight operations in the Adriatic Sea, sent there in response to the strife in the former Yugoslavian republic of Bosnia-Herzegovina. (*Saratoga* once again demonstrated the ability of the aircraft carrier to operate in confined seas, a capability stripped of skeptics by operations of *Saratoga* and other carriers in the Red Sea and Persian Gulf during Operation *Desert Storm*.)

An Amphibious Ready Group centered on *Iwo Jima* (LPH-2), with Marine Medium Helicopter Squadron 365 (Reinforced) embarked, also took station in the Adriatic, ready to support UN relief efforts to the besieged Bosnian capital of Sarajevo. On September 4, two CH-53E and two AH-1W helicopters from *Iwo Jima*, 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.

Navy P-3C patrol aircraft deployed to NAS Sigonella, Sicily, are also busily engaged in Operation *Maritime Monitor*, the enforcement of United Nations sanctions against Yugoslavia.

## Southern Watch

Twenty Navy aircraft from Carrier Air Wing (CVW) 5 aboard *Independence* (CV-62) in the Persian Gulf were the first coalition aircraft on station over Iraq on August 27 as Operation *Southern Watch* began. Announced by President George Bush on August 26, *Southern Watch* is the enforcement of a ban on Iraqi warplanes and helicopters from flying south of the 32nd parallel and attacking Shiite Moslem ethnic groups in the marshes of southern Iraq. Any Iraqi aircraft caught airborne would be shot down.

In addition to planes from *Independence*, Marine Corps AV-8B *Harriers* from *Tarawa* (LHA-1) also supported the operation. *Independence* was later relieved in the Persian Gulf by *Ranger* (CV-61), with CVW-2 embarked.

## Provide Relief

On September 16, 1992, President Bush dispatched the *Tarawa* Amphibious Ready Group to the coast of Somalia as part of Operation *Provide Relief*, a multinational effort to relieve the massive starvation ongoing in the anarchy of the country. The Marine *Harriers* and helicopters of Marine Medium Helicopter Squadron 161 (Reinforced) stood ready offshore to protect relief teams and transport aircraft bringing in a contingent of Pakistani peace-keeping troops to Mogadishu, the capital city.

## Hurricane Andrew

Naval Aviation units were called into action to help relieve the suffering of hundreds of thousands of Americans in the wake of Hurricane *Andrew*, the most costly natural disaster ever to strike the United States.

After *Andrew* hit the southern tip of Florida on August 24, leveling Homestead AFB, military units were soon heavily involved in the relief operations. Navy ships with supplies and repair capabilities steamed from East Coast ports for Florida. Four CH-46D helicopters from Helicopter Combat Support Squadron 8 operated from Ponce (LPD-15) and Sylvania (AFS-2). NAS Jacksonville, Fla.-based reserve Helicopter Antisubmarine Squadron 75 dispatched two SH-3H helicopters to assist in the rebuilding effort.

Fighter Squadron 102, NAS Oceana, Va., used its F-14A *Tomcats* equipped with the Tactical Aerial Reconnaissance Pod System to photograph the damaged areas of the Bahamas and southern Florida. The photographs were delivered to local officials to assess the extent of damage.

Gwen Newman

**Relief supplies for Hurricane Andrew victims are loaded aboard a VR-54 C-130T at NAS Memphis, Tenn.**

Navy transport aircraft flew relief supplies to southern Florida as well. A C-9B from Fleet Logistics Support Squadron (VR) 58 flew down 74,000 items donated from sailors and their families stationed at NAS Jacksonville, NAS Cecil Field, and NS Mayport. A DC-9 from VR-60 and a C-130T from VR-54 flew 65,000 pounds of donated supplies from NAS Memphis, Tenn. Twelve Marine Corps KC-130 transports from squadrons at MCAS Cherry Point, N.C., were also assigned to the rebuilding effort.

In addition, many other Naval Aviation units throughout the country and overseas hosted storm refugees and gathered relief supplies to send to the hurricane victims in Florida and Louisiana; these units included NAS Alameda, Calif.; NAS Pensacola, Fla.; NAS Key West, Fla.; Tactical Electronic Warfare Squadron 33; NS Guantanamo Bay, Cuba; and Fleet Composite Squadron 10.

## Typhoon Omar

Overshadowed in the news by Hurricane *Andrew*, Typhoon *Omar* devastated Guam on August 28, damaging over 4,000 homes. Joint Task Force Marianas coordinated the relief efforts of all of the military services. Naval Aviation units involved in relief efforts included NAS Agana, Helicopter Combat Support Squadron 5, Fleet Logistics Support Squadron 50, and Fleet Air Reconnaissance Squadrons 1 and 5.

## Hurricane Iniki

After Hurricane *Iniki* hit the Hawaiian Islands on September 11, Navy and Marine Corps aviation units sprang into action to aid the local population, especially those on the devastated island of Kauai. NAS Barbers Point and its tenant commands provided volunteers and assisted local residents. *Belleau Wood* (LHA-3), stopping at Pearl Harbor on its way to its new home port of Sasebo, Japan, sailed to Kauai with troops and relief supplies.

Pacific Missile Range Facility, Barking Sands, the Navy's airstrip on Kauai, was only slightly damaged by *Iniki*, and served as a hub of relief flight operations. Navy and Marine Corps aircraft flew in supplies and personnel. A KC-130 from Marine Aerial Refueler Transport Squadron 352 brought in seven tons of supplies all the way from NAWS Point Mugu, Calif.

**VX-1, NAS Patuxent River, Md., is conducting operational testing of the HH-60H strike rescue version of the Sikorsky Seahawk. VX-1 is evaluating the recently installed Enhanced Self-Protection Equipment, which includes a radar warning receiver, a laser warning receiver, a missile warning detector, a countermeasures dispenser set, and a pair of GAU-17 miniguns. Testing will continue at NAWS China Lake, Calif.; NAS Fallon, Nev.; MCAS Cherry Point, N.C.; and aboard various naval ships.**

# New Naval Strategy

## "...From the Sea"

The Secretary of the Navy (SecNav), Chief of Naval Operations (CNO), and Commandant of the Marine Corps signed a new Navy-Marine Corps strategy on September 28, 1992.

"This document marks a sea change in naval strategic thinking. It details a new naval philosophy for today's world," said Acting SecNav Sean O'Keefe.

The strategy, entitled "...From the Sea" and developed in response to the challenges of today, shifts the focus from a global threat to a focus on regional challenges and opportunities, and concentrates on warfare near land and maneuver from sea.

"'...From the Sea' defines a combined vision for the Navy and Marine Corps and outlines the new direction of the Navy and Marine Corps team, both active and reserve, in providing the nation with naval expeditionary forces shaped for joint operations, and operating forward from the sea," according to CNO Adm. Frank B. Kelso II.

The principal elements of the new direction of the naval service are strategic deterrence and defense, forward presence, crisis response, and reconstitution. The new strategy is a fundamental shift from open-ocean war fighting on the sea toward joint operations from the sea. Changing the naval forces to an enabling force, the strategy will allow the Navy and Marine Corps to respond to global crises and provide the initial capability for joint operations in conflict.

"Never has the term 'Navy-Marine Corps team' had more relevance. Our new strategic direction will result in naval forces better tailored to respond to the types of world crises that we anticipate facing in the 21st century," said Gen. Carl E. Mundy, Jr., Commandant of the Marine Corps. "We now have a tailored force package better structured to complement the components of a joint force. We are entering a golden era for naval force capabilities."

The naval service will continue to emphasize nuclear deterrence through the use of nuclear ballistic submarines, as well as the traditional naval mission of sealift. Increased attention to command, control, and surveillance; battle space dominance; power projection; and force sustainment is required to successfully execute this new strategy. Flexibility is also a key factor – naval forces will be tailored continuously to anticipate and support national needs.

"Even though the times are uncertain and the threats are unpredictable, the opportunities are abundant. We must capitalize on these opportunities while ensuring that our naval forces remain capable," said Kelso.

To ensure the successful implementation of the new

Navy-Marine Corps strategy, a Naval Doctrine Command will be established to develop doctrine for expeditionary warfare.

## American Legion, VFW Support Naval Air

The 3.1-million members of the American Legion and the 2.2-million members of Veterans of Foreign Wars cast a solid vote in support of Naval Aviation during their recent 1992 conventions. Representatives of the worldwide organizations unanimously adopted a resolution to show appreciation and recognize the members of Naval Aviation for: risking their lives daily on behalf of Americans; being ready and on station around the world to respond immediately to threats to our security and world peace; and being ready to respond to global crises and serve as America's first response to threats to our national security interests.

## Wasp, Helos Conclude Drug Ops

Amphibious assault ship *Wasp* (LHD-1) and its unusual assortment of embarked helicopters concluded a two-month drug interdiction deployment this summer, marking the first such operation for *Wasp* and the successful marriage of the SH-60B helicopter to the LHD for such operations.

Embarked on *Wasp* were detachments from NAS Mayport, Fla.-based Helicopter Antisubmarine Squadron Light (HSL) 44, and Helicopter Combat Support Squadrons (HCs) 2 and 8, NAS Norfolk, Va. The HSL-44 detachment marked the first time that three SH-60Bs deployed as a single detachment, and the first SH-60B detachment to deploy aboard an amphibious assault ship. HCs 2 and 8 provided two CH-53E and two CH-46D helicopters, respectively.

The APS-124 radar aboard the SH-60Bs greatly extended the search horizon of *Wasp*. During the operation, the HSL-44 detachment identified over 450 surface contacts in 123 sorties and over 400 flight hours.

*Wasp* helicopters also foiled an attempted piracy of a U.S.-flagged vessel during the deployment (see *NANews*, Sep-Oct 1992, p. 4).

## USMC Units Join CVWs

The integration of Marine tactical jet squadrons into Navy carrier air wings (CVWs) as ordered by the Secretary of the Navy has begun with the recent assignment of two Marine fighter attack squadrons (VMFAs) to two CVWs for upcoming deployments.

VMFA-312, a night-attack FA-18C squadron based at MCAS Beaufort, S.C., has joined CVW-8 assigned to *Theodore Roosevelt* (CVN-71), displacing Attack Squadron 65, an A-6E squadron which has been temporarily assigned ashore. On the West Coast, VMFA-314, an FA-18A squadron based at MCAS El Toro, Calif., has joined CVW-11 assigned to *Abraham Lincoln* (CVN-72), displacing Fighter Squadron 114, an F-14A squadron which has also been temporarily assigned ashore.

Plans for the future call for a third Marine Corps FA-18C squadron and an EA-6B squadron to integrate into Navy carrier air wings.

## FA-18E/F Contract Awarded to Macair

The Department of the Navy awarded in July 1992 the first installment of a $3.97-billion contract to McDonnell Douglas to develop the single-seat FA-18E and two-seat FA-18F *Hornet* strike fighters, the follow-on aircraft for the FA-18C/D.

The contract awarded $97.3 million toward the design, development, manufacture, and testing of five FA-18E and two FA-18F versions. An additional $754-million contract to General Electric was placed for development of the F414-GE-400 engine, which will power the new *Hornet*.

## So Long, Yellow Gear

"Yellow gear," the fleet name for aircraft support equipment, will soon be another term consigned to the dustbin of history. Eventually, all support equipment (SE) will be painted white.

In an article in the September-October 1992 issue of *Mech*, Gabrielle Gerliczy described the reason for the landmark change. The yellow paint used on SE contained lead and chromates, now considered a health risk. The Naval Air Warfare Center Aircraft Division, Lakehurst, N.J., found a nontoxic paint that minimized health risk and still provided protection from corrosion.

The highly visible white paint has been evaluated on three ships and five bases. It is less expensive than yellow paint, does not conflict with existing flight-line color codes, and is considered as visible or more visible than yellow paint under most conditions. The switch to white for existing SE will occur during scheduled overhaul or when more than 50-percent touch-up is required.

## Old Sea Stallions Put to Pasture

The Marine Corps finally retired the last of its CH-53A versions of the Sikorsky *Sea Stallion* heavy assault helicopter after almost 28 years of service, completing their replacement by the more capable CH-53D and CH-53E.

On July 16, 1992, Marine Heavy Helicopter Squadron (HMH) 462, the last squadron to operate the CH-53A, flew the last two from MCAS Tustin, Calif., to the Aerospace Maintenance and Regenera-

**Twelve stingers on this Hornet – An FA-18C assigned to VX-4, NAWS Point Mugu, Calif., displays air-to-air weaponry consisting of 10 AIM-120 AAMRAM missiles (under wing and on fuselage stations) and two wingtip-mounted AIM-9 Sidewinders.**

**The last Marine CH-53As, like the one shown here lifting Marines in Vietnam 25 years ago, have been retired.**

tion Center, Davis-Monthan AFB, Ariz. HMH-462 is transitioning to the CH-53E.

First flown on October 14, 1964, the CH-53A replaced the Sikorsky CH-37C in Marine Corps use, and entered combat in Vietnam during the mid-1960s, becoming an essential part of amphibious tactical airlift for the Corps. Production totaled 139 before the CH-53D succeeded it on the production line in late 1968. The CH-53A saw front-line service in six active HMH squadrons, as well as three reserve squadrons and two training units.

The Navy also operated a small number of CH-53As, including 15 adapted for minesweeping and used by Helicopter Mine Countermeasures Squadron 12 to clear North Vietnamese waters after the Vietnam War during Operation *Endsweep*. Others were used by Fleet Composite Squadron 1 in Hawaii, and two used by the Naval Air Development Center, Warminster, Pa., for test work were designated NCH-53A.

## VMAQ-4 Deactivated and Reactivated

A September 12 ceremony at NAS Whidbey Island, Wash., marked the deactivation (officially September 30) of Marine Tactical Electronic Warfare Squadron (VMAQ) 4 after over 11 years of service as a reserve squadron, and its reactivation (officially October 1) as an active squadron. Lt. Col. Stephen K. Protzeller was the last CO of the reserve VMAQ-4, handing over command to Lt. Col. David P. Rann as the first CO of VMAQ-4 as an active squadron.

The VMAQ-4 *Seahawks* were activated at NAS Whidbey Island on May 21, 1981, as the electronic warfare squadron for the reserve Fourth Marine Aircraft Wing. Equipped with the EA-6A *Intruder*, the squadron participated in many training evolutions until it was called to active duty on March 11, 1991, following Operation *Desert Storm*, ordered to transition to the EA-6B *Prowler*, and deployed to MCAS Iwakuni, Japan, to relieve a VMAQ-2 detachment, all within a 90-day period.

The *Seahawks* are moving to MCAS Cherry Point, N.C., to join VMAQs 1, 2, and 3 based there and will join their deployment rotation cycle.

Also deactivated on September 12 were Detachments C of Marine Aircraft Group 46, Marine Aviation Logistics Squadron 46, and Marine Wing Support Squadron 471, all of which formed the headquarters and support elements for VMAQ-4 at Whidbey Island.

# Disestablished

## ComTraWing-3

Commander Training Air Wing (CTW) 3 was disestablished at NAS Chase Field, Beeville, Texas, on August 31, 1992, after 11 years of service. Capt. K. E. Shean was the last commander.

CTW-3 was established at Chase Field in 1971 as one of six training air wings set up under the Chief of Naval Air Training's single-site training concept. The abundance of training airspace near Chase Field provided excellent training for student aviators. During its existence, CTW-3 "winged" over 4,000 jet Naval Aviators. With the impending closure of Chase Field and the reduced pilot training requirement of the defense drawdown, CTW-3 was selected for disestablishment, leaving the burden of strike syllabus training to CTW-1 at NAS Meridian, Miss., and CTW-2 at NAS Kingsville, Texas.

The wing's basic training squadron, VT-26, was disestablished in May (see *NANews*, Jul-Aug 92, p.6) as the pilot training pipeline slowed. The two advanced training squadrons, VTs 24 and 25, outlasted the wing, shutting down in September (see below) as the last aviators to be winged at Chase Field left for their fleet squadrons.

## VT-24

Training Squadron (VT) 24 was disestablished on September 18, 1992, at NAS Chase Field, Beeville, Texas, after over 32 years of service. Cdr. Austin Abercrombie was the last CO of the *Bobcats*.

Established at Chase Field on May 1, 1960, from Air Training Unit 203, VT-24 provided advanced jet training to student Naval Aviators in the F9F-8B (AF-9J, later TAF-9J) and F9F-8T (TF-9J) *Cougar*. In July 1972, the squadron switched to the TA-4J *Skyhawk*, which it operated for the last 20 years. The *Bobcats* received the Meritorious Unit Commendation in 1977 for setting an all-time advanced training command record of 64,000 mishap-free hours, and received many other safety awards. In addition to training Navy and Marine Corps pilots, VT-24 also trained pilots from other nations, including Singapore.

## VT-25

Training Squadron (VT) 25 was disestablished on Septem-

**CTW-3 jets over NAS Chase Field. VTs 24 and 25 operated TA-4Js and VT-26 flew the T-2C.**

ber 18, 1992, at NAS Chase Field, Beeville, Texas, after over 32 years of service. Cdr. Glenn Pittman was the last CO of the *Cougars*.

Established on May 1, 1960, from Air Training Unit 213, the *Cougars* trained student Naval Aviators in the F9F-8T (TF-9J) and F9F-8B (AF-9J, later TAF-9J) *Cougar*. The TA-4J *Skyhawk* replaced the *Cougar* in 1972 and was used by the squadron to train pilots for the remaining 20 years of VT-25's career. VT-25 was the recipient of many awards for excellence in training and safety during that time. In 1985, VT-25 was awarded the Meritorious Unit Commendation, and in 1988, was recognized for amassing 79,000 mishap-free hours over the previous six years.

## VA-176

A September 18 ceremony marked the disestablishment (effective October 30) of Attack Squadron (VA) 176 after over 42 years of service. Cdr. Lee A. Hawkes was the last CO of the *Thunderbolts*.

Established on June 1, 1955, at NAS Cecil Field, Fla., with AD-6 (A-1H) *Skyraiders*, VA-176 moved to NAS Jacksonville, Fla., later that year, joining Air Task Group 202 aboard *Randolph* (CVA-15) for its first deployment, which took the squadron to the Mediterranean during the 1956 Suez Crisis. From 1959 to 1965, the *Thunderbolts* made six deployments to the Mediterranean and North Atlantic with Carrier Air Group 10 aboard *Essex* (CVA-9) and *Shangri-La* (CVA-38), interspersed with patrols off crisis spots in the Caribbean.

VA-176's only Vietnam deployment, in 1966 with Carrier Air Wing (CVW) 10 aboard *Intrepid* (CVS-11), proved eventful on September 9, 1966, when Ltjg. William Patton shot down a North Vietnamese MiG-17 jet fighter with his A-1H – a feat performed only once before during the war by a *Skyraider*. During 103 days on the line in the Tonkin Gulf, the *Thunderbolts* lost only one pilot and plane to enemy fire.

During the squadron's following deployment, with CVW-3 aboard *Saratoga* (CVA-60) in the Mediterranean, VA-176 launched four *Skyraiders* in support of *Liberty* (AGTR-5) when it was attacked on June 8, 1967, by Israeli aircraft and patrol boats. After return to Jacksonville, VA-176 retired its last *Skyraiders* on April 25, 1968, making it the Navy's last piston-engined, carrier-based attack squadron and the last attack squadron to operate the A-1 "Spad" (edging out VA-25 by two weeks).

VA-176 A-6E Intruder. Ltjg. Robert B. Kielbowicz

VC-1 A-4E and TA-4J Skyhawks over Hawaii. Ltjg. B. D. Boluyt

The *Thunderbolts* entered the jet age at NAS Oceana, Va., transitioning to the A-6A *Intruder* during 1968-69, joining CVW-6 for the remaining 23 years of service, during which it made 18 deployments to the Mediterranean, North Atlantic, and Indian Ocean aboard *Franklin D. Roosevelt* (CVA-42), *America* (CV-66), *Independence* (CV-62), and *Forrestal* (CV-59).

In 1969, the squadron's aircraft were used to seed chemicals into Hurricane Debbie. In 1970, VA-176 became the first fleet squadron to include the KA-6D tanker in its inventory, and acquired a few A-6C versions in 1971 until transitioning to the A-6E in 1975.

VA-176 was on scene during many international crises over the last two decades, including flying close air support missions over Grenada in October 1983 during Operation *Urgent Fury*, followed in December by a strike against Syrian positions in Lebanon in retaliation for hostile fire against U.S. reconnaissance aircraft. The squadron also flew support for Operation *Earnest Will* (the 1988 escort operations for oil tankers in the Persian Gulf), and on its last deployment in 1991, for protection of Kurdish refugees following the Persian Gulf War.

## VC-1

Fleet Composite Squadron (VC) 1 was disestablished on September 30, 1992, at NAS Barbers Point, Hawaii, after over 41 years of service. Cdr. Russell F. Plappert was the last CO of the *Blue Aliis*.

Established at Barbers Point on July 20, 1951, as Utility Squadron (VU) 1, the squadron adopted the heritage of an earlier utility squadron (VJ-1), which had served the fleet from 1925 until 1949 and had seen action at Pearl Harbor during WW II. In 1957, VU-1 absorbed VU-3 Detachment B and Helicopter Utility Squadron Detachment 2. VU-1 was redesignated Fleet Composite Squadron (VC) 1 on July 1, 1965. VC-1 established a detachment at Barking Sands on the island of Kauai on April 16, 1975.

Over its long existence, VC-1 became an aviation institution in Hawaii, providing a wide variety of services to Navy, Marine Corps, and Hawaiian Air National Guard units based in the islands, and to the thousands of ships that passed by on their way to and

from the western Pacific. VC-1's aircraft were fixtures of every RIMPAC exercise and trained many allied ships as well U.S. Navy ships. The squadron participated in the recovery of the Apollo 11 lunar mission spacecraft in 1969, and contributed much to the economic development of the Hawaiian Islands with photographic support. From 1977 until 1986, VC-1 provided transportation for Commander in Chief, U.S. Pacific Fleet.

Services provided by the squadron over the years included target tow, missile and drone launch control, airborne intercept controller training, radar calibration, torpedo recovery, gunfire spotting, electronic warfare threat simulation, search and rescue, plane guard, vertical onboard delivery, aerial photography, logistics, aerial refueling, dissimilar air combat training, and executive transport.

Typical of composite squadrons, VC-1 operated many aircraft types during its life: TBM-3E/3U, JD-1 (UB-26J), F4U-4, F9F-5KD (DF-9E), F9F-2/2P/5P/6D/-8/8B/8P/8T, F2H-2P, F6F-5D/5K, SNB-5P (RC-45J), HUP-2 (UH-25B), HUK-1, AD-5 (A-1E), UA-1E, FJ-3D/3D2 (DF-1C), FJ-4, TV-2 (T-33B), TV-2D (DT-33B), F8U-1 (F-8A), F-8B/C/K, DF-8A/F, US-2C, A-4B/C/E, TA-4J, DP-2E, P-3A, UP-3A, VP-3A, VC-118B, UH-34D/J, SH-3A/G, UH-3A, and CH-53A, and a variety of target drones.

## HSL-36

Helicopter Antisubmarine Squadron Light (HSL) 36 was disestablished at NS Mayport, Fla., on September 30, 1992, after 17 years of service. Cdr. Ronald Gibbs was the last CO of the *Lamplighters*.

Established on September 26, 1975, at NS Mayport with the SH-2F *Seasprite* helicopter, HSL-36 became the third Atlantic Fleet Light Airborne Multipurpose System squadron. Its missions included antisubmarine warfare, antiship missile defense, search and rescue, gunfire spotting, medical evacuation, and logistics.

The squadron's first detachment deployed in May 1976 to the Indian Ocean aboard *Capodanno* (FF-1093), and soon the *Lamplighters* had detachments operating all over the world. In 1980, HSL-36 became the first squadron to deploy aboard the *Spruance*-class destroyers and *Oliver Hazard Perry*-class frigates.

HSL-36 deployed its detachments to worldwide hot spots, including support for retaliatory strikes against Libya in 1986 and escort of oil tankers in the Persian Gulf in 1987-88 (during which one of its helicopters evaded a hostile surface-to-air missile). During Operations *Desert Shield* and *Desert Storm* in 1990-91, HSL-36 had several detachments deployed in support of the multinational interdiction force that was enforcing UN sanctions against Iraq.

HSL-36 SH-2F Seasprite. PHAN R. Maxwell

VMA-133 A-4Fs in 1976.

Harry Gann/McDonnell Douglas

# Deactivated...

## VMA-133

A September 19 ceremony at NAS Alameda, Calif., marked the deactivation (officially September 30) of Marine Attack Squadron (VMA) 133 after 36 years of service. Lt. Col. Daniel Dell'Osso was the last CO of the *Dragons*.

Activated at MCAS El Toro, Calif., on May 1, 1943, as Marine Scout Bombing Squadron (VMSB) 133, the squadron flew its SBD *Dauntless* dive-bombers on garrison duty in the Hawaiian, Johnston, and Palmyra islands for nearly a year until deploying to the Solomon Islands in August 1944. VMSB-133 flew missions in support of the island-hopping campaign from Bougainville, Emirau, and New Guinea, arriving on Mindanao Island in the Philippines in April 1945. The squadron provided close air support for Army troops until Japanese resistance collapsed. VMSB-133 was deactivated in the Philippines on August 1, 1945.

Reactivated as reserve Marine Fighter Squadron (VMF) 133 at NAS Oakland, Calif., on April 15, 1958, the squadron moved in July 1961 to NAS Alameda, Calif., where it resided for over 30 years.

Trained with F2H-2/3/4 *Banshee* jet fighters, the squadron switched to the A-4 *Skyhawk* in 1962 and was redesignated VMA-133.

For the next 30 years, VMA-133 successively operated several attack versions of the *Skyhawk* (A-4A/B/C/F/M) and trained in the TA-4F/J as well. The squadron was never mobilized for an emergency, but participated in many exercises over the years.

## VMA-331

A September 18 ceremony at MCAS Cherry Point, N.C., marked the deactivation (officially September 30) of Marine Attack Squadron (VMA) 331 after 43 years of service. Lt. Col. Richard G. Barr was the last CO of the *Bumblebees*. VMA-331 was the first Marine Corps *Harrier* squadron ever to be deactivated.

Activated at MCAS Cherry Point, N.C., on January 1, 1943, as Marine Scout Bombing Squadron (VMSB) 331, the squadron moved its SBD *Dauntless* dive-bombers to the

Ellice Islands in November 1943, flying patrols to protect friendly shipping. VMSB-331 entered combat in March 1944 when it moved to Majuro in the Marshall Islands and flew strikes to keep Japanese forces on Jaluit Atoll neutralized.

The squadron was redesignated Marine Bomber-Fighting Squadron (VMBF) 133 in October 1944 when its SBDs were replaced by F4U *Corsairs*. However, the VMSB designation returned in February 1945 when the squadron's *Corsairs* were replaced by SB2C-4 *Helldivers*. VMSB-331 continued attacks against Japanese-held islands in the Marshall Islands until the war's end. The squadron was deactivated at NAS Miramar, Calif., on November 21, 1945.

The squadron was reactivated on April 23, 1952, at MCAS Miami, Fla., as VMA-331, initially equipped with the F6F-5 *Hellcat*, and acquiring the F4U-4 *Corsair* in 1953. Switching to the AD-5 *Skyraider* in 1954, the squadron made a two-month cruise aboard *Ticonderoga* in 1955, and relocated to MCAS El Toro, Calif., in May 1958, making a year-long deployment to MCAS Iwakuni, Japan, a month later with AD-6 *Skyraiders*. VMA-331 moved to MCAS Beaufort, S.C., in October 1959 upon return from Japan and entered the jet age with transition to the A4D-2 (A-4B) *Skyhawk*.

During the 1962 Cuban Missile Crisis, VMA-331 deployed to NS Roosevelt Roads, P.R., for use in the event of hostilities. After transition to the A-4E, the squadron deployed in July 1964 to the Mediterranean for nine months aboard *Forrestal (*CVA-59), and returned to Roosevelt Roads shortly thereafter during the crisis in the Dominican Republic. VMA-331 returned to the Mediterranean in July 1970 as part of Carrier Air Wing 7 aboard *Independence* (CVA-62).

VMA-331 transitioned to the A-4M in 1971 and moved to MCAS Cherry Point, N.C., in August 1975, participating in the unit rotation of squadrons to MCAS Iwakuni during the 1980s. The squadron was reduced to cadre status in July 1984 and reactivated on January 30, 1985, as the first operational squadron equipped with the AV-8B *Harrier II*. The squadron also made the first transatlantic flight in the AV-8B, and became the first AV-8B squadron to deploy to the western Pacific.

The *Bumblebees* also made history in January 1991 by flying the first *Harrier* combat sorties ever launched from a Navy ship. Deployed aboard *Nassau* (LHA-4) in the Persian Gulf during Operation *Desert Storm*, VMA-331 flew 243 combat missions and dropped more than 256 tons of ordnance in support of UN coalition forces in Kuwait, losing only one plane and pilot to hostile fire. VMA-331's final year was busy with exercise detachments, including a deployment aboard *Nassau* off Norway.

Maj. J. Doyle, USMC

**VMA-331 AV-8B Harriers aboard Nassau (LHA-4) during Operation Desert Storm.**

Dassault Aviation

## For the Record...

✈ **VA-155**, one of two A-6E attack squadrons assigned to CVW-2 aboard *Ranger* (CV-61), is scheduled for **disestablishment** upon return from its current Persian Gulf deployment, which is also *Ranger*'s last cruise.

✈ **VMA(AW)-533** was redesignated **VMFA(AW)-533** on October 1, 1992, in conjunction with its transition from the **A-6E** *Intruder* to the **FA-18D** *Hornet*. The squadron will be the first of three squadrons at MCAS Cherry Point, N.C., to operate the two-seat *Hornet*.

✈ ***Forrestal*** (AVT-59) arrived at Philadelphia Naval Shipyard on September 14, 1992, to commence a 14-month, $157-million complex overhaul, which will include work on her catapults, propeller shafts, and main fuel pumps, tanks, and valves.

✈ The Marine Corps is spreading its **night-attack AV-8Bs** among all of its *Harrier II* squadrons, eventually giving each squadron a mixture of 6 day-attack and 14 night-attack versions, rather than equipping squadrons exclusively with one version or the other. **VMA-513**, MCAS Yuma, Ariz., is the last AV-8B squadron to integrate the night-attack version into its inventory.

**Frances's new naval fighter, the Rafale M01, underwent an extensive set of aircraft platform interface tests this past summer at NAWC AD Lakehurst, N.J. The tests included catapult launches, arrested landings, and jet blast deflector tests.**

✈ **VQ-6**, NAS Cecil Field, Fla., received its first **ES-3A** carrier-based electronic reconnaissance aircraft on August 19, 1992. The *Black Ravens* will eventually operate eight ES-3As and deploy them aboard Atlantic Fleet carriers in small detachments.

✈ **VQ-3** completed its move to its new home base at **Tinker AFB, Okla.**, in early September 1992, leaving NAS Barbers Point, Hawaii, after 10 years of residence there. VQ-3's move is part of the consolidation of the Navy's TACAMO squadrons at one site under Commander, Strategic Communications Wing 1. **VQ-4**, NAS Patuxent River, Md., will move to Tinker in January 1993.

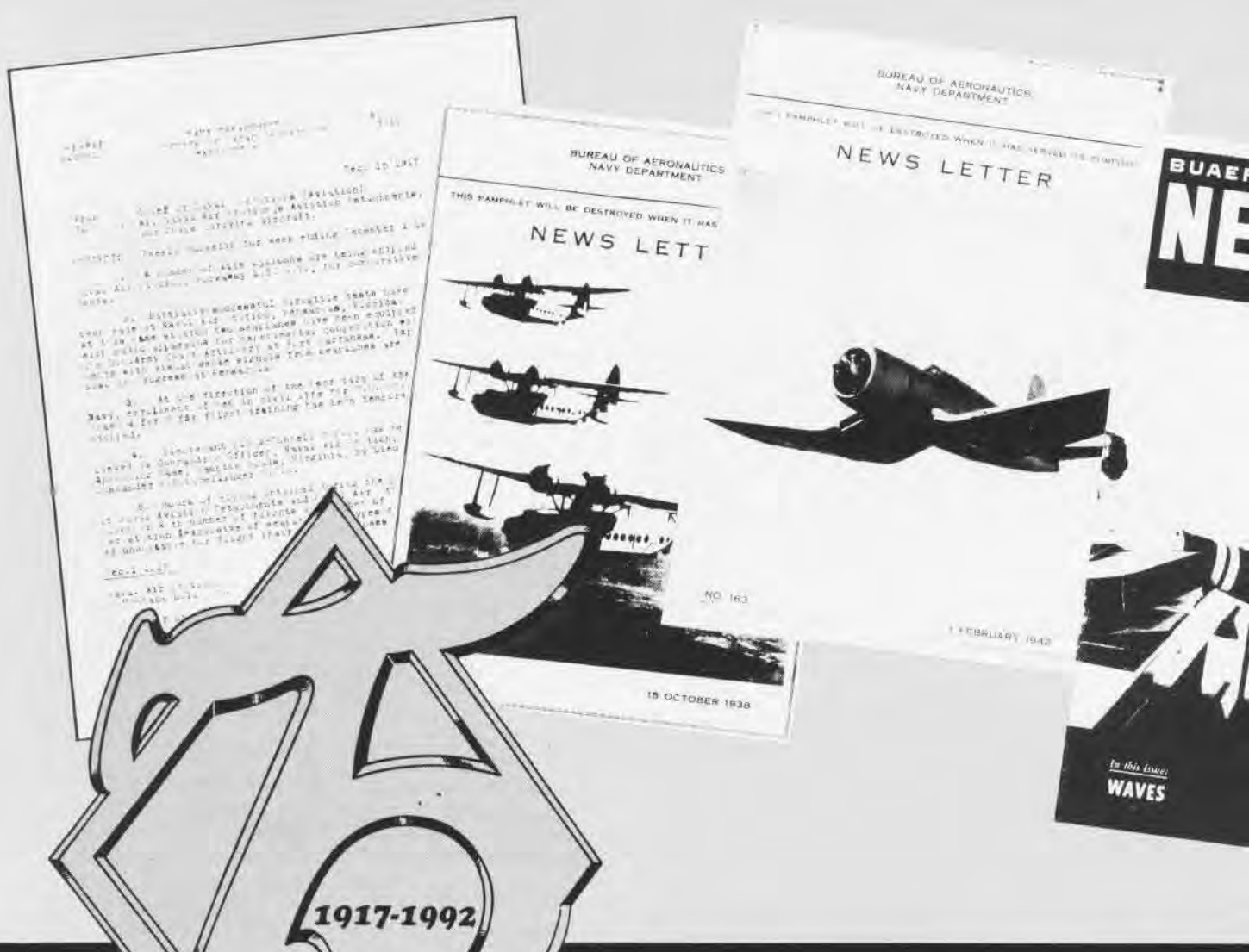
✈ **HC-1**, NAS North Island, Calif., transferred its last **CH-53E** *Super Stallion* helicopters by August 1992; all Navy CH-53Es are now concentrated in the Atlantic and Mediterranean. HC-1 now operates only versions of the H-3 *Sea King*.

✈ The Navy successfully launched the first improved version of the McDonnell Douglas **Standoff Land Attack Missile** (SLAM) in August 1992 from a Naval Air Warfare Center Weapons Division FA-18D *Hornet*. The missile made a direct hit on a simulated high-value target located in a cluttered environment.

✈ No more single-engine "Huey" helicopters remain in U.S. naval service. NAWS China Lake, Calif., recently retired one **UH-1E**, one **TH-1L**, and two **HH-1K** versions, and Naval Coastal Systems Center, Panama City, Fla., has retired its one **NUH-1E**. All "Hueys" remaining in naval service are twin-engine HH-1N and UH-1N versions.

✈ **Now we're really out of fighters...** Two RF-8G ***Crusaders***, withdrawn years ago from Navy use but maintaining in inventory and used in the X-31 program by Rockwell International, have been stricken from the inventory. BuNo 144617 was donated to the Marine Corps Air-Ground Museum, Quantico, Va., from display at MCAS El Toro, Calif.; BuNo 145607 was transferred to the Air Force Flight Test Center Museum, Edwards AFB, Calif.

✈ **UH-3H** is the designation applied to former SH-3H *Sea King* helicopters being modified as utility transports with cargo hooks and a passenger capacity of nine. The first one, BuNo 148052, is undergoing testing.




# Happy 75th Anniversary, Naval Aviation News

**By Joan A. Frasher**

Flimsy onionskin! Really? It's true. In 1919-20, *Naval Aviation News* was printed on onionskin paper when it was called the *Daily Aviation News Bulletin*. But its origin is the December 15, 1917, *Weekly Bulletin* published in letter format by the Chief of Naval Operations (Aviation) and containing information on personnel assignments, plans for expansion, and summaries of aviation activities in the Navy. Later, under the Bureau of Aeronautics (BuAer), other names included: *U.S. Naval Aviation Operations Report*, *Weekly News Letter*, *News Letter*, and the *BUAER News Letter*, which debuted the magazine format in its February 15, 1943, edition. From its slick appearance today as one of the premier military periodicals, it's hard to believe the magazine had such humble beginnings.

The magazine has closely followed,


grown, and been honed to a sharp edge like Naval Aviation itself throughout 75 years of existence. With the expansion of the field of aeronautics, the newsletter evolved into the highly polished and refined publication it is today. It has become the communication link with the men and women of Naval Aviation.

*Naval Aviation News* is one of the three oldest military periodicals – behind *Armor* magazine, first published in 1888, and *Field Artillery Journal*, in 1911 – and it is the oldest Navy periodical. The continuity of its editing and style is due primarily to its civilian editors, but for technical accuracy, the responsibility lies with its military editors, most of whom have been Naval Aviators.

In 1922, the publication acquired a full-time editor, Joy Bright Little, whose immediate boss was a young lieutenant named Arthur W. Radford (later Chairman of the Joint Chiefs of Staff). Since then, 14 more names have appeared on *NANews*'s masthead, including the current editor, Lieutenant Commander Richard R. Burgess.

With the escalation of WW II, the need arose for an aviation publication that was easy to read and full of information. The staff expanded to include experienced personnel in writing, editing, and graphic arts. After the war, the usual budget problems occurred, but *NANews* managed to survive as the voice of Naval Aviation.

During WW II, Grampaw Pettibone had been introduced in *Naval Aviation News* as the old curmudgeon aviator who chastised flyers for violations of Naval Aviation safety. The character was created by Lieutenant Commander Hubert Spencer (Seth) Warner and drawn by Lieutenant Robert Osborn, who later became a renowned artist. The first cartoons appeared in the *BUAER News Letter*, January 15, 1943. Today, Osborn still illustrates Grampaw Pettibone in *NANews*. Though the writers of the safety articles and Gramps' "voice" have changed throughout the years, Osborn's rendering of the "sage of safety" is the mainstay with which the magazine continues to be identified.

For 75 years, *Naval Aviation News* has kept the fleet and Naval Aviation enthusiasts informed about the people, events, policies, and technological progress of Naval Aviation. Our look has changed with the times, but our mission has been constant: to publish current and historical information which encourages pride and professionalism, enhances safety, and advances the goals and objectives of the Chief of Naval Operations.

The first issue of the *Daily Aviation News Bulletin* concluded with this item: "Recently the Naval Air Station at San Diego loaned a number of Navy pigeons to the Army for use in connection with an extended search which was being made in lower California, Mexico, for two lost Army aviators. All of the birds but two homed in excellent condition, bearing messages of importance."

Messages of importance continue to fill the pages of *Naval Aviation News* – and will for years to come. ■

# Air Traffic Controller

Story and Photos by JO1(SW) Eric S. Sesit

During a lull in flight operations, AC1 Ingrid Singleton keeps an eye on ground traffic moving along the runways at NAS Patuxent River, Md.

They control the skies. Not from the cockpits of *Hornets* or *Tomcats*, but from control towers that grace the landscapes of naval air stations around the world, and from radar scopes buried under the flight decks of aircraft carriers.

They are the Air Traffic Controllers (ACs). Their job, according to *The Blue Jackets' Manual*, is to "assist in the essential safe, orderly, and speedy flow of air traffic by directing and controlling aircraft...."

In order to become an AC, a recruit must make a qualifying score on the Armed Services Vocational Aptitude Battery exam, have 20/20 correctable vision, have good depth perception, not be color blind, and pass an annual flight physical.

According to ACCS(AW/SW) Tom E. Housworth, the AC detailer in Washington, D.C., the flight physical is not to qualify the ACs for flight status. "They haven't flown since the time of the Navy's blimps," Housworth said. "The physical is necessary because of the medications that doctors can prescribe. We don't want people talking to aircraft if they're taking some kind of medication. The same type of medication that would down a pilot would down a controller."

ACs must enlist for five years. The sea-shore rotation for all paygrades is 36 months at sea and 60 months ashore.

"The reason for the five-year shore rotation is that everywhere we go we are required to qualify at that duty station," said Housworth. "Some of the larger facilities have as many as 15 operating positions and each one could take three to six months to qualify in. Our goal is to have a person qualify in all of the operating positions in two to three years and then have a sufficient payback period so that person can train other controllers."

Although the language and fundamentals of air traffic control are the same everywhere, each air station is different.

"They all have different runway configurations, and different types of jets, helicopters, and missions, so the situation is unique everywhere you go – thus, the need to qualify at every new duty station," said Housworth.

This sometimes makes for interesting working conditions. Often, a junior person will be supervising a senior per-

Trying to solve a problem adjacent to the Patuxent River airfield, AC2 Larry Heuser points out a possible ground hazard to ACC(AW) Rochele A. Housworth.

Checking his equipment for the latest data, ACAN Martin Ham keeps pilots posted on the current weather conditions.

son as is the case with AC2 Larry J. Heuser. Heuser has been in the Navy for four and a half years and is a Facility Watch Supervisor at NAS Patuxent River, Md.

"When a first class petty officer arrives, he or she has to go through the quals just the same as everyone else," said Heuser. "Since I've been here longer, I'm already qualed and it's up to me to train the person. However, in military matters, the first class is in charge. Also, the senior person has a lot of experience in different situations, so I make it a point to listen to his or her input."

After recruit training, the ACs attend a 16-week A school at Naval Air Technical Training Center, Memphis, Tenn. If an AC is assigned duty onboard a carrier, he or she will attend a six-week Carrier Air Traffic Control Center (CATCC) course and earn the 6902 Navy Enlisted Classification (NEC) code. Other NECs include the 6901, which is awarded upon completion of nine weeks of Advanced Radar Air Traffic Control School, and proposed for 1993 is the Amphibious Air Traffic Control Course, which will provide the 6903 NEC.

Currently, there are approximately 3,000 men and women wearing the winged-microphones of the Air Traffic Controller on their uniform. Of these, 787 are women.

"Presently, *Forrestal* [AVT-59] is the only ship the women can go on. But we do have several Type 3 billets, which is overseas shore duty that counts as sea duty for women and men," said Housworth.

The difference between shore duty and sea duty for ACs is like night and day.

"Separation rules are reduced," said Housworth. "On shore, you have to keep aircraft separated 1,000 feet vertically and 3 miles longitudinally. In the carrier environment, you're allowed to go down to 800 feet vertically and a mile and three quarters longitudinally. Then throw in the pitching and rolling deck, the rough seas, and a boltering pilot. It's probably two to three times more complex at sea than on shore."

AC2 Heuser looks forward to his upcoming sea tour. He will be attending CATTC before joining *Carl Vinson* (CVN-70) in the near future.

"I'm really looking forward to going to sea and controlling aircraft," Heuser said. "I consider that a real challenge. To me, it's the ultimate in air traffic control."

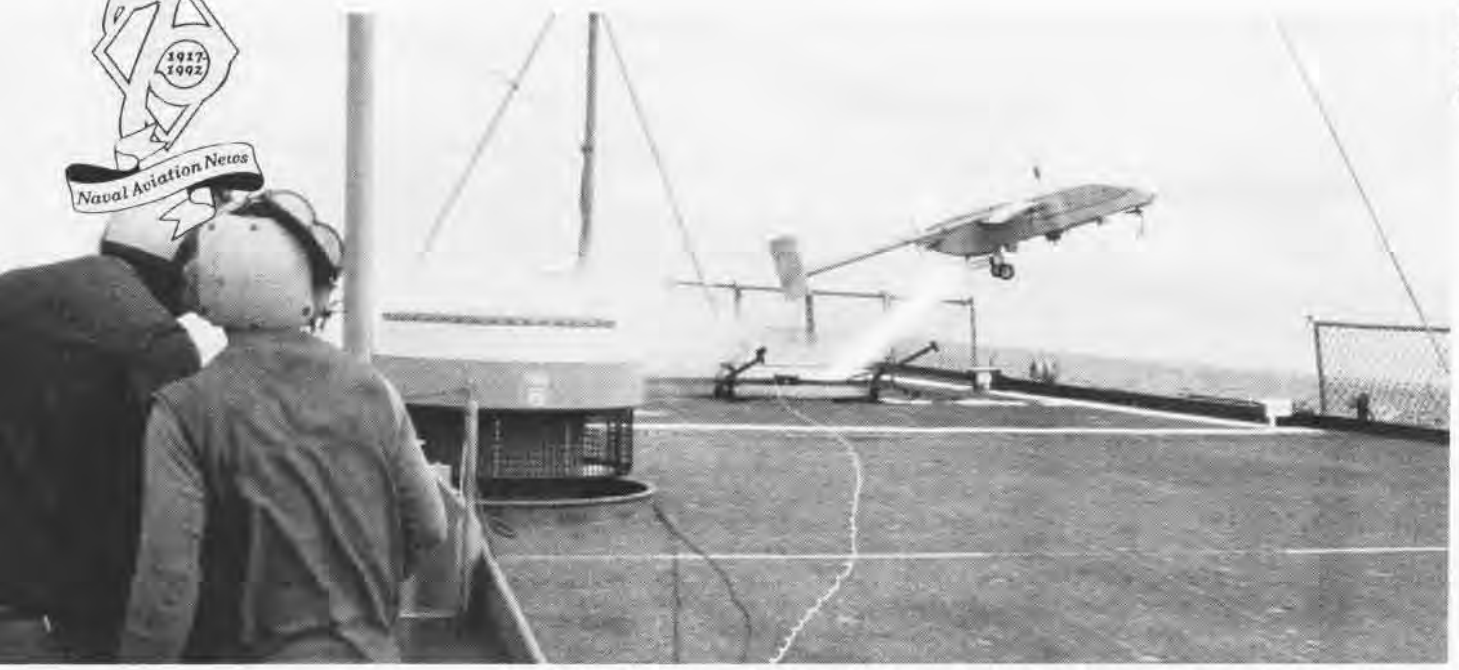
Many ACs take their training to the civilian world where they can earn big salaries for their skills. The federal government will hire air traffic controllers provided they have not reached their 31st birthday. If they are over 31, they can only go into management positions. There is a proposal before Congress to allow the government to hire ex-military controllers up to the age of 45.

While the money is out there in the civilian world, many ACs choose to make the military their career. According to ACC(AW) Kyle C. Rogers, Radar Chief at NAS Patuxent River, the reason is simple.

"When you give a young person as much responsibility as we do, controlling multimillion dollar aircraft, they receive a great deal of job satisfaction. To many people, that's real important," said Rogers.

Promotion for ACs is good up to the E-6 level. Then, as in almost every other Navy rating, it gets tough. Lateral conversions into the rating are only accepted at E-4 and below. ACs have not been offered any exit bonuses but they are eligible for Selective Reenlistment Bonuses.

Senior Chief Housworth summed up his feelings on the AC rating by adding, "Air traffic controllers sometimes get accused of having big egos. That may be so, but I consider that a prerequisite for excellence." ■



Steve Harris

VC-6 Det 2 launches Pioneer RPV from Missouri (BB-63) during its Desert Storm deployment.

# Remotely Piloted Vehicles

**By Vance Vasquez**

Since the days of the Civil War when men were sent aloft in balloons to spot enemy troop movements and cannon emplacements, the United States, as well as many other nations, has searched for a way to safely get accurate and precise intelligence about the changing conditions on any given battlefield. With a quest to keep pilots and aircraft in one piece, the wartime role of the remotely controlled vehicle has evolved.

The U.S. Navy has been vitally interested in remotely piloted vehicles (RPVs) since 1983 when the Secretary of the Navy authorized acquisition of an Israeli Mastiff system. Israel was the first to manufacture a Mastiff-type RPV, which evolved into what was to become the mainstay of the Navy/Marine Corps' modern-day RPV program, the *Pioneer*. The Pacific Missile Test Center (PMTC) at Point Mugu, Calif., became involved with its acceptance and development soon afterwards.

After the Navy acquired the Israeli system, the U.S. Marine Corps evaluated it and proved that RPVs equipped with reconnaissance sensors could be operated in a maritime environment. A second Navy reconnaissance RPV program began in 1984. BQM-74C target drones were modified to carry nose-mounted cameras, with a video data link to transmit video pictures to receiving stations. PMTC was designated the technical support lead for the program. In August 1985, the center was designated the lead field activity for test and evaluation of all unmanned aerial vehicles (UAVs) for the Navy.

That year a fly-off competition between the *Pioneer* (AAI-Mazlat) and the *Mirach 20* (Pacific Aerosystem) RPV systems was scheduled at China Lake, Calif., with PMTC support. Due to a 30-day response time requirement, only the *Pioneer* RPV was flown. A contract was awarded in December 1985 to AAI-Mazlat for the *Pioneer*, and in 1986 the Navy unmanned aerial vehicle program office was established.

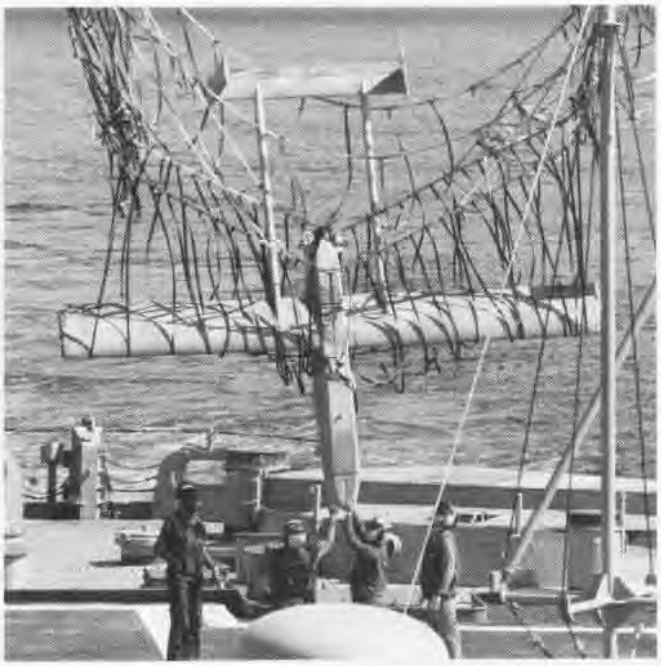
As the Navy's UAV program grew, the Pacific Missile Test Center (PMTC recently consolidated, forming part of the Naval Air Warfare Center Weapons Division, NAWC WD) was formally tasked to support not only the *Pioneer*'s development effort but also the emerging Medium Range UAV and the Tactical Air-Launched Decoy programs. PMTC was responsible for the initial shipboard integration trials aboard *Iowa* (BB-61), where five successful shipboard flights were conducted.

In April 1986, the UAV Fleet Assistance and Support Team was established by the Chief of Naval Operations. The team was chartered primarily to monitor the *Pioneer* contractor's logistics and to validate technical manuals. However, its role quickly expanded to include operating and maintaining PMTC's prototype *Pioneer* system. November of that year marked the formal establishment of the UAV program management team at PMTC.

Testing to prove the *Pioneer* could operate in both shipboard and land-based environments was completed in 1988. A "baseline" on the *Pioneer* was made in which the concept of *Pioneer*-type vehicles was verified and procurement of four updated systems was approved. Test results from PMTC heavily influenced that procurement decision.

The Secretary of Defense consolidated various military UAV programs under a Joint Program Office (JPO) in 1988, and the Navy became the executive service for all UAV development and procurement. The JPO established a UAV masterplan, with four varieties of UAVs to be developed – close range, short range, medium range, and

Steve Harris



A Pioneer RPV is recovered aboard Missouri (BB-63).

AE2 Richard Cooperider

Pioneer RPV departs Wisconsin (BB-64) during Operation Desert Storm.

# Prove Their Worth

endurance.

The close range concept provides a 200-pound UAV equipped primarily with a miniaturized infrared sensor. Contracts were recently awarded to 10 contractors to demonstrate prototype close range vehicles and sensors.

The short range UAV is intended to replace the *Pioneer* in land-based operations. Two separate contractor teams featuring the McDonnell-Douglas/Developmental Science Corporation's *Sky Owl* and the Israel Aircraft Industries' TRW *Hunter* are competing in a fly-off.

The prototype systems are being flight tested at Fort Huachuca, Ariz., after being flown in tests at China Lake for signature measurements and at Point Mugu in the maritime role. By the end of the year, one of the prototype systems will be selected to go into production.

The medium range UAV is capable of high subsonic flight and is currently under development by the TRA Company. With the NAWC WD heavily involved in the test and evaluation of the system, the technical evaluation will be followed by a joint services operational evaluation.

Endurance UAVs, intended to be capable of reconnaissance missions lasting from one day to weeks, are under study.

The *Pioneer's* primary uses are reconnaissance, battle damage assessments, and artillery or naval gunfire adjustments. The unmanned aerial vehicle transmits a video picture to a ground control station where an intelligence officer directs targeting data, by radio, to ground headquarters and forward units.

The *Pioneer* is able to provide real-time intelligence through its gyro-stabilized, high-resolution television camera or an alternate forward-looking infrared system for day or night operations. The video from the sensor is down-linked from the *Pioneer* to the ground station where it's recorded on a video cassette recorder.

In Operation *Desert Storm*, the *Pioneer* provided real-time intelligence to battlefield commanders throughout the fast-paced Persian Gulf War. Detachments of Fleet Composite Squadron (VC) 6 launched the *Pioneers* from two battleships, *Missouri* (BB-63) and *Wisconsin* (BB-64).

A one-of-a-kind *Pioneer* air vehicle, equipped with a radio-relay package which Point Mugu personnel were instrumental in integrating, was utilized for the first time during the Gulf War.

Unlike the *Pioneer* UAV, manned reconnaissance assets such as the F-14A *Tomcat* with the Tactical Airborne Reconnaissance Pod System have film cameras which have to be down loaded, processed, and then interpreted. This delay proved to be a shortcoming in reconnaissance operations during the Gulf War.

While several *Pioneers* returned from combat missions with bullet-riddled wings, only one was confirmed lost to enemy fire. Its last video images were of tracers coming up from enemy antiaircraft positions.

The future of UAV seems bright with an ever-growing market and expanding evolution. Future UAVs are envisioned to be used to carry electronic countermeasures, chaff dispensers, and chemical and biological warfare monitoring equipment, as well as a host of other payloads. ■

*Special thanks to LCdr. Richard Bergren of VC-6 for assistance with this article.*

**Editor's note: The Navy, which has long operated drones as targets, made use of them briefly in Vietnam. A VC-3 detachment deployed aboard Ranger (CV-61) in October 1969 and conducted some 30 missions with Ryan 147SK Firebee photoreconnaissance drones launched from the carrier. The operation, Belfry Express, enjoyed limited success.**

# F8C/O2C Helldiver

**By Hal Andrews**

Dive-bombing caught the public's attention in the early 1930s as the Navy developed carrier aviation. Even Hollywood recognized this. With the Navy's cooperation, it made the 1931 movie, *Dive-Bomber*, best described as the *Top Gun* of its day. The airplane stars were F8C-4s – like *Top Gun*'s F-14s, two-seat fighters. With the company's policy of naming their airplanes, they were the first Curtiss *Helldivers*.

As with many aircraft programs, a series of events led to the *Helldiver*'s starring role in *Dive-Bomber*. And as happens frequently, other events made this the highlight of the first *Helldiver*'s operational service. Wrapped up in the story were issues of single vs. two-place fighters, multi-mission vs. single-mission tactical aircraft, and even airborne command and control – rudimentary as it was then.

The F8C designation was first applied under a 1927 contract for three experimental two-place carrier or seaplane fighter/bombers, based on the Army's Curtiss *Falcon* observation/attack airplanes. When production *Falcons* were ordered instead as F8C-1s and -3s to meet an urgent Marine Corps requirement, a completely new design for a Pratt and Whitney Wasp-powered, carrier-based, two-place fighter/dive-bomber was substituted for the original XF8C-2.

Along with strengthened structure to meet the dive-bomber terminal dive speed and pullout requirements carrying a 500-pound bomb, the new design emphasized compactness. The biplane wing configuration of the *Falcon* was continued; the swept-back upper wing outer panels allowed the center section to be mounted further forward, providing better visibility and cockpit access for the crew. The two forward-firing machine guns were in the upper wing center section, firing just outside the propeller disc so that synchronizing wasn't required. Construction was typical mixed metal and wood, with fabric covering.

Completed and flown to NAS Anacostia, D.C., for demonstration tests and trials in December 1928, the XF8C-2 suffered the program's first setback. In the required terminal dive and pullout, structural failure resulted in its destruction; fortunately, the company's test pilot bailed out safely. The strengthened replacement XF8C-2 completed demonstration and started trials five months later. It had a NACA (National Advisory Committee for Aeronautics) cowling to improve high-speed performance. This obstructed pilot forward visibility as well as maintenance accessability, and trials went on without it. After a month of trials, the XF8C-2 went back to Curtiss for a number of improvements, including deleting the landing gear stub axles and their axle hooks which were to have engaged the soon-to-be-removed carrier deck longitudinal wires on landings.


F8C-4

XF8C-2

Planning for a production version continued at the Bureau of Aeronautics, with many changes, including installation of brakes and a tail wheel, underwing racks for 100-pound bombs, and deletion of the 500-pound bomb carriage. In June, as the modified XF8C-2 resumed trials, a prototype XF8C-4 was ordered to expedite the production program.

Production of 18 Navy and 9 Marine F8C-4s was planned, the latter land based without arresting hooks and emergency flotation bags, and with increased fuel capacity. With the production price lower than expected, 9 more Navy airplanes were added for a total of 36, the 9 Marine airplanes as F8C-5s, and the contract signed soon after the XF8C-4's.

Early delivery of the F8C-4s was desired for VF-1B to explore two-seat fighter operational use and value. However, the changes in design resulting from the XF8C-2 trials and other planned improvements delayed delivery of both the XF8C-4 and the first production F8C-4 until April 1930. While the XF8C-4 underwent successful carrier type trials, the F8C-4 went back to Curtiss for additional modifications and improvements, to be incorporated in subsequent production airplanes.

In August, initial F8C-4s were delivered to VF-1B to begin squadron training; the rest were delivered over the next two months. The F8C-5s went to VO-7M at Quantico, Va., also in September-October. Nine additional F8C-5s had meanwhile been ordered for the Marines, the first of these going

to Anacostia for trials in September and all nine going to Quantico before the end of the year.

While production was proceeding, Curtiss took the initiative to build two prototypes of an improved *Helldiver*, aimed at significantly improved performance using new Wright Cyclone 650-hp R-1820E engines, and incorporating enclosed cockpit canopies and a narrow but effective drag-reducing ring cowl encircling the engine without the penalties of the XF8C-2's NACA cowling.

With the interest of Assistant Secretary of the Navy for Air David Ingalls, who had been a WW I Navy pilot, the first was equipped for his use, without military equipment. Tested at Anacostia as the XF8C-7 in October, it was purchased and flown by Ingalls on a West Coast base tour in November. The second military model was tested at Anacostia in December as the XF8C-8, a carrier-based fighter/dive-bomber with considerably increased performance compared to the F8C-4s just entering operational service.

By this time, other program events included the decision to incorporate the high-lift and low-speed control features of the Curtiss *Tanager* that won the 1929 Guggenheim safety contest on two F8C-4s, and their fuselages were retained for this conversion to XF8C-6s. Forty-three more F8C-5s were ordered for both the Marines and assignment to Naval Reserve bases. With their more general use, all of the F8C-5s were redesignated as O2C-1s.

In anticipation of upcoming 1931 Fleet Exercises in February, a new concept of using the Cyclone *Helldivers* in a military command sense emerged, and the XF8C-8 and two similar aircraft were acquired as O2C-2s on an expedited basis, the additional two being built using the fuselages that were set aside for the XF8C-6s, to be replaced at a later date. The O2C-2s were flown to San Diego in late January 1931 – one assigned to each of the fighter squadrons for use as radio-equipped airborne command planes for each carrier's squadrons during the Fleet Exercises. Immediate results were adversely affected by fuel tank leakage.

As deliveries of the 43 O2C-1s began, the first going to Anacostia for trials in late March, Curtiss-Wright set out to sell the Navy an improved Cyclone-powered *Helldiver*. The structural failure of two successive prototypes in dives doomed the effort. The modified first O2C-2 crashed at Buffalo in September with fatal results for its Curtiss flight crew. The further modified replacement, redesignated XS3C-1 for its primary orientation to the increasingly important carrier-based scouting mission, followed at Anacostia in February 1932 with its Navy pilot bailing out, spelling the end of the advanced *Helldiver* program.

By this time, 30 additional O2C-1s for the reserves had been ordered and delivered, and the F8C-4s had been withdrawn from the fleet for overhaul and assignment to the reserves and other utility uses. The XF8C-7 and second O2C-2 also became utility planes. Use of the third O2C-2 for service testing a new Wright twin-row R-1510 engine ended in July 1933 following an in-flight fire. The XF8C-6 modification was cancelled and these two aircraft became O2C-1s for the Marines.

Marine use of O2C-1s at VO-7M continued, the last being stricken in July 1936. Reserve use, at bases across the country lasted less than a year longer, the last being retired in May 1937. By then, while they had served well, they were hardly seen as *Helldivers*.

Dave Ostrowski

O2C-2

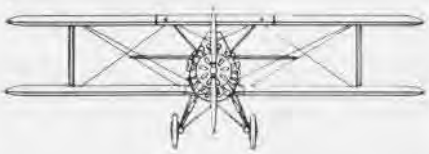
O2C-1

Dave Ostrowski

F8C-4

| | F8C-4 | O2C-2 |
|---|---|---|
| Span (both wings) | 32' | 32' |
| Length | 25'11" | 25'7" |
| Height | 10'11" | 10'11" |
| Engine | P&W R-1340C 450 hp | Wright R-1820E 640 hp* |
| Maximum speed | 137 mph | 174 mph* |
| Service ceiling | 15,000' | 20,000'* |
| Range (internal fuel) | 399 mi | 616 mi. |
| Crew | 2 | 2 |
| Armament | Two .30 machine guns fixed; two .30 machine guns flexible; and four 100-lb. bombs. | Same |

*As tested; service engine 575 hp.



Ken Schmidt

**The Outlaw Hunter P-3C seen at Diego Garcia en route to Operation Desert Storm.**

# Outlaw Hunter

**By David Reade and LCdr. Rick Burgess**

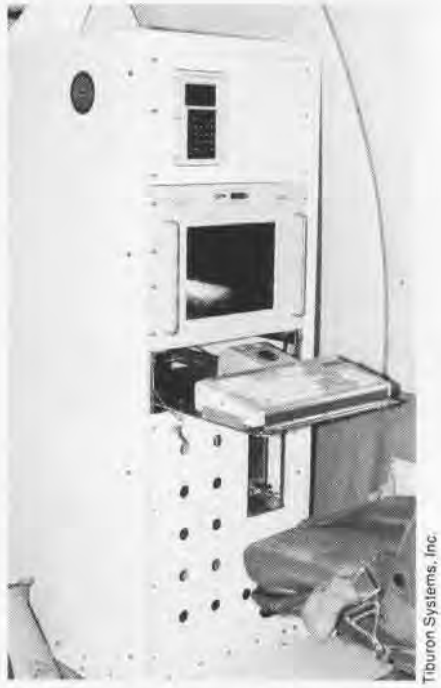
Within a few hours of the start of the coalition air campaign against Iraqi forces in Operation *Desert Storm*, a specially configured Navy P-3C *Orion* patrol plane detected Iraqi patrol boats in the northern Persian Gulf. The P-3 immediately vectored strike aircraft to destroy the targets and later provided the battle damage assessment of the action, which became the first naval engagement of the war.

The hapless Iraqi targets never knew what found them; they were victims of "Outlaw Hunter," an improved Over-the-Horizon Targeting (OTH-T) system installed in a P-3C proof-of-concept aircraft.

Developed by the Navy's Space and Naval Warfare Systems Command (SPAWAR) with the cooperation of Tiburon Systems, Inc., of San Jose, Calif., Outlaw Hunter traces its origins to the "Outlaw Shark" program developed in the mid-1970s by Lockheed Missiles and Space Company. Outlaw Hunter consists of three major avionics improvements to the P-3, coupled by tactical data processor to the Officer-in-Tactical-Command Information Exchange System (OTCIXS), the worldwide maritime command and control network. The union of the APS-137(V) inverse synthetic aperture radar with the Global Positioning System yields high-quality targeting data which can be immediately transmitted from the Advanced Tactical Workstation by satellite communications linked by OTCIXS to the battle group commander. The targeting information can then be used by the battle group commander to launch strikes by aircraft or cruise missiles. The Outlaw Hunter crew on station can update taskings, pass on contact reports, maintain a tactical plot of the battle area, and assess battle damage to the targets.

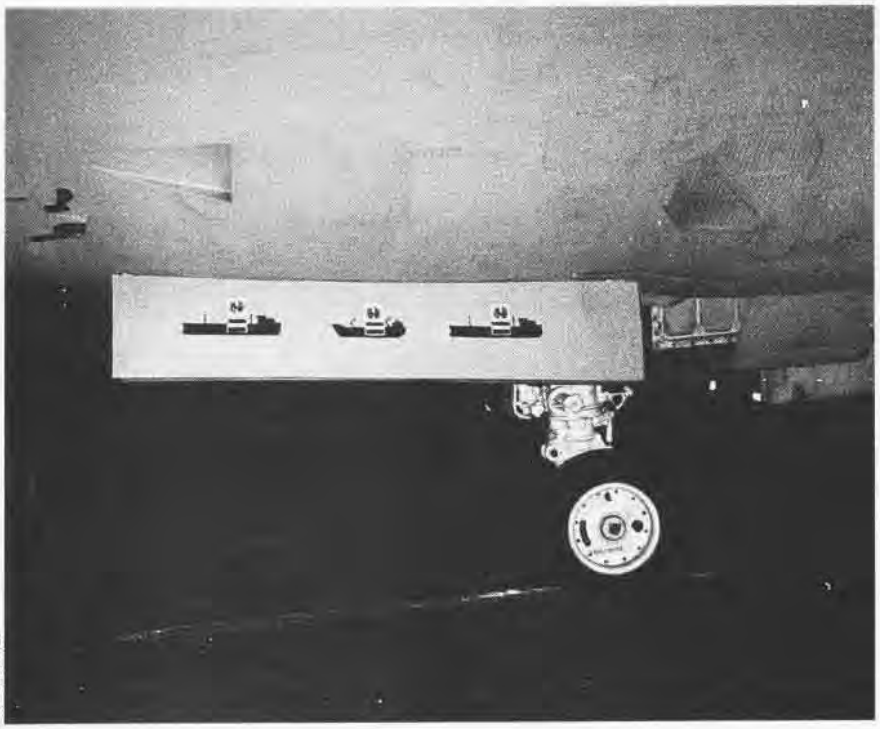
Designed to test the feasibility of the integrated targeting system on a fleet aircraft, the test-bed Outlaw Hunter P-3C was used to evaluate operator workload, engineering problems (including weight, placement of the stand-alone system in the aircraft, and location of antennas), and integration with existing aircraft systems.

Patrol Squadron (VP) 9, NAS Moffett Field, Calif., was the first fleet squadron to use Outlaw Hunter,



Tiburon Systems, Inc.

**The Advanced Tactical Workstation installed in the aft fuselage of the Outlaw Hunter P-3C.**



Ken Schmidt

**Kills of Iraqi ships are tallied on the nose gear door of the Outlaw Hunter P-3C.**

operating the aircraft in a fleet exercise and deploying it to the Indian Ocean prior to the Iraqi invasion of Kuwait. The aircraft was transferred to VP-19, which took it to the Persian Gulf War (with equipment upgraded for maximum performance) and flew it throughout the conflict with great success. The aircraft spent some time with VP-4 before being returned to VP-9 – when VP-19 was disestablished in mid-1991 – to join its follow-on, "OASIS I." Outlaw Hunter is now back with VP-4.

OASIS (Over-the-Horizon Airborne Sensor Information System) is the name of the follow-on operational testing phase of the OTH-T program. The OASIS phase involves down-scaling the equipment for integration into the Tactical Coordinator (TACCO) station of the P-3. The OASIS I system was hurried to the Persian Gulf but was too late to see action in the short war; this aircraft is now assigned to VP-46. OASIS II, with improved software, has been installed aboard a P-3C assigned to VP-26, NAS Brunswick, Maine. While Outlaw Hunter and OASIS I/II – which were all brought up to the same standard by the summer of 1992 – currently use the stand-alone equipment in the rear of the P-3's cabin, the follow-on OASIS configuration will include state-of-the-art technology and software to integrate the system into the TACCO station.

Implemented by SPAWAR on a "nonacquisition funding" basis, the OTH-T program is funded in the FY-93 budget. The Outlaw Hunter/OASIS system, when funded, could be backfitted into the existing P-3C fleet and incorporated into any follow-on aircraft. Given its excellent war record and the enthusiasm of battle commanders, the outlook is hopeful.

In the meantime, development is in progress to integrate the system into sea-based aircraft to expand the OTH-T capability available to the battle group commander. "Outlaw Viking" is a prototype system in an S-3B *Viking* undergoing engineering, operator workload, and carrier-suitability testing. In service, it will be operated by fleet air antisubmarine warfare squadrons, already familiar with the APS-137(V) radar installed on every S-3B.

"Outlaw Seahawk" is a similar program to integrate the APS-137(V) radar in an SH-60B *Seahawk* helicopter. Instead of transmitting targeting data directly from the helicopter over the OTCIXS, the helicopter transmits the data to its mother ship, which in turn relays the information to the battle group commander over the OTCIXS. ■

David Reade

**The Oasis II P-3C assigned to VP-26 sports SATCOM and Global Positioning System antennas atop its fuselage.**

# TACAMO Herks Retired

**By LCdr. Rick Burgess**

PH2 W. G. Harvey

**The beginning...One of the two C-130Gs assigned to the TACAMO component of VR-1.**

An era in Naval Aviation ended as quietly as it began. On May 26, 1992, the Navy's last EC-130 *Hercules* TACAMO (take charge and move out) aircraft departed Fleet Air Reconnaissance Squadron (VQ) 4 at NAS Patuxent River, Md., for storage and eventual disposal. Its replacement by the sleek Boeing E-6A *Mercury* was then complete.

The TACAMO mission originated in secrecy in 1961 as a program to test very low frequency (VLF) communications using a C-121 and a KC-130F. The success of the project generated a requirement to deploy an airborne communications platform that could receive, process, and relay vital information to the fleet of ballistic missile submarines that had recently entered service as the third leg of America's nuclear deterrent triad.

Originally ordered by the Navy under the designation GV-2U, four C-130E airframes were delivered off the Lockheed production line as C-130Gs (BuNos 151888-151891) and extensively modified with a mobile installation (three equipment vans) of second-generation VLF communications gear (TACAMO II). The first C-130G was delivered on December 26, 1963, with two aircraft each assigned to the TACAMO components of Fleet Tactical Support Squadrons (VRs) 1 and 21 at Patuxent River and NAS Barbers Point, Hawaii, respectively. VR-21 transferred its TACAMO component to Airborne Early Warning Squadron (VW) 1 at NAS Agana, Guam, on January 1, 1966. The KC-130F TACAMO prototype aircraft served both components when one of the C-130Gs was undergoing depot-level maintenance.

As the testing and refining of equipment and techniques continued, a new generation of TACAMO gear (TACAMO III) was developed, being a permanently installed integrated system. TACAMO III featured a 10,000-pound weight reduction, increased communications flexibility, vastly improved in-flight maintenance, and a crew lounge facility. Eight built-for-the-purpose EC-130Q TACAMO III aircraft (BuNos 156170-177) were purchased. As the mission became integrated into national command structure, the decision was made to establish the TACAMO components as full squadrons. On July 1, 1968, VQs 3 and 4 were established at NASs Agana and Patuxent River, respectively, and soon grew to become two of the largest squadrons in the Navy. The same month, the C-130Gs were redesignated EC-130Gs. VQ-4 also became the fleet readiness squadron for the EC-130.

The next generation equipment suite, TACAMO IV, arrived in 1974 and featured a new power amplifier, a dual trailing wire antenna system, and a high-speed antenna deployment and retraction system. Ten more EC-130Qs were purchased (see table) for a total of 22 TACAMO "Herks." Further improvements followed in 1978 under the TACAMO Improvement Program (TIP) (including a teletype distribution matrix), and in 1979 under TIP II, which added a message processor system, satellite communication capability, and an enhanced VLF capability. The aircraft were eventually hardened to protect their communications suites from electromagnetic pulse damage from nuclear detonation.

With the full complement of EC-130Qs onboard, the four EC-130Gs were eventually relegated to test and training roles. One, BuNo 151891, served as the TACAMO development platform with the Naval Air Test Cen-

**The end...The last deploying TACAMO C-130 crew included: Lt. William Crowell II, Mission Cdr.; Cdr. (Sel.) Stephen Crawford, Aircraft Cdr.; Lt. Steven Miles, Airborne Communications Officer (not pictured); Lt. Timothy Jewell; Lt. Michael Mabee; Ltjg. Marks Parsons; AEC Theodore Jachens; AE1 Joseph Lavery; AE1 Jon Bosson; AD1 Charles Silcox; RM2 Gregory Jones; AT1 James Tilton; AT1 Christopher Gill; AT2 Gerald Waddell; AMS3 Mark Slade; AMS3 Steven Horvath; AMS3 Richard Gray; AMS3 Daniel Lange; AT2 Lauren Blakley; AE2 Kelly Krantz; AMH1 Pedro Ramirez; and RM1 Larry Miller (not pictured).**

ter, Patuxent River, from the early 1970s until 1987, later becoming a TC-130G, as did 151888. Another, BuNo 151890, was damaged beyond repair by an in-flight fire, but its communications suite survived and was used as a ground trainer and test module.

As the TACAMO fleet built up, the EC-130s were maintaining a continuous airborne communications watch. Twenty-four hours per day, year-round, an EC-130 was airborne somewhere in the world, ready to relay the "doomsday" messages should they come. The stress on the EC-130 airframes that resulted from the long and frequent flights, much of the time in angles of bank to properly trail the antennas, aged the aircraft to become "older than their years."

During the late 1980s, two EC-130Qs (BuNos 159348 and 159469) were modified as TC-130Qs, serving as pilot proficiency trainers and utility logistics aircraft. The first of these deployed to the Mediterranean in late 1990 with two crews to augment VR-22 in the logistics effort supporting Operation *Desert Storm*.

The replacement of the EC-130 by the E-6A began in mid-1989 with VQ-3 (which had moved to Barbers Point in August 1981), followed by VQ-4 in 1991. The last *Hercules* TACAMO deployment departed Patuxent River on May 7, 1992, with its 22-member crew in EC-130Q BuNo 161531. This aircraft was also the last to go, following its mates to the Rockwell International facility at Shreveport, La., for communications suite removal.


**An EC-130Q assigned to VQ-4.**

Although most were retired from the TACAMO role to the Arizona desert, some former TACAMO "Herks" have started second careers (see table). One TC-130G serves as "Fat Albert" – transport for the *Blue Angels* – and one TC-130Q helps Antarctic Development Squadron 6 train its LC-130 pilots at NAWS Point Mugu, Calif., replacing an EC-130Q used briefly in that role. The National Aeronautics and Space Administration recently acquired three EC-130Qs for various research projects. At least one EC-130Q, acquired by the Marine Corps Air-Ground Museum, Quantico, Va., will end up as a museum piece or gate guard.

The *Hercules* and its tireless crews shouldered the TACAMO role with reliability and grace for over 28 years, silently doing their share in winning the cold war. With a new world order, and a standdown from continuous airborne operations, the "comm guard" has shifted to the elegant E-6A *Mercury*, deployed by VQs 3 and 4 from Tinker AFB, Okla., in support of the new U.S. Strategic Command. ■

*Special thanks to Michele Haden of NAS Patuxent River, Lt. Christoper Redman and Ltjgl. David Homeier of VQ-4, Cdrs. W. Roeting and Mark Johnson of N88OG, and David Reade for information.*

## EC-130 Fleet Disposition

| BuNo | Disposition |
|---|---|
| **EC-130G** | |
| 151888 | Redesignated TC-130G. Stored at AMARC for reclamation. |
| 151889 | Stored at NADep Cherry Point, N.C., for reclamation. |
| 151890 | Struck after in-flight fire January 15, 1972. |
| 151891 | Redesignated TC-130G. Serves *Blue Angels* as transport. |
| **EC-130Q** | |
| 156170 | Former VXE-6 crew trainer. Stored at AMARC for reclamation. |
| 156171 | Stored at AMARC for reclamation. |
| 156172 | Stored at AMARC for reclamation. |
| 156173 | Stored at AMARC for reclamation. |
| 156174 | Former VXE-6 crew trainer. Stored at AMARC for reclamation. |
| 156175 | Stored at AMARC for reclamation. |
| 156176 | Lost in mishap at Wake Island, June 21, 1977. |
| 156177 | Stored at AMARC for reclamation. |
| 159348 | Redesignated TC-130Q. Serves as crew trainer for VXE-6. |
| 159469 | Redesignated TC-130Q. Stored at AMARC for reclamation. |
| 160608 | Stored at AMARC for reclamation. |
| 161223 | Donated to Marine Corps Air-Ground Museum. |
| 161494 | Transferred to NASA. |
| 161495 | Transferred to NASA. |
| 161496 | Transferred to NASA. |
| 161531 | Last EC-130 in Navy service. Transferred to NOAA. |
| 162312 | Stored at AMARC. Sold to NSF for atmospheric research. |
| 162313 | Stored at AMARC for reclamation. |

AMARC = Aerospace Maintenance and Regeneration Center
NADep = Naval Aviation Depot
NASA = National Air and Space Administration
NOAA = National Oceanographic and Atmospheric Administration
NSF = National Scienoe Foundation

# Naval Aviation in

McDonnel Douglas via Harry Gann

**SBD Dauntlesses fly upwind of their carrier after a Torch mission.**

## The First Joint Operation of WW II

England was relieved when America entered WW II in December 1941. The British hoped that the U.S. would soon collaborate with them in operations against the Nazis. British Prime Minister Winston Churchill, under pressure at home and from the Soviet Union's dictator Josef Stalin to open a second front, pleaded with President Franklin Roosevelt to join British forces in an invasion of the North African coast.

The Vichy French, and the Free French, under General Charles De Gaulle, were furious that British aircraft had bombed French ships in 1940, even though the attacks were to prevent the ships from falling into German hands. (Vichy is a city in southern France where a puppet government was set up when the Nazis conquered France in June 1940.) The British knew that to invade by themselves would probably mean intense French resistance. Only a joint operation with American forces leading the way stood any chance of acceptance.

With the Japanese advance halted in the Pacific, America turned some of its attention to other theaters. Roosevelt agreed to join Churchill in Operation *Torch,* the invasion of North Africa. American and British naval air played major supporting roles in neutralizing any French opposition to the amphibious landings. It was one of the few times that American naval air power fought in a major campaign outside the Pacific.

## The Vichy French Air Force: A Mixed Bag

On paper, the French forces were formidable and included surface ships, submarines, numerous antiaircraft artillery emplacements, and some 500 aircraft of various types and

# Operation Torch

**By Cdr. Peter Mersky, USNR**

capabilities.

Before the war, the French bought several U.S. Army Air Force aircraft, and Vichy squadrons now flew the Curtiss *Hawk* 75A (an export version of the P-36 single-seat fighter), the Martin *Maryland* twin-engine light bomber and reconnaissance aircraft, and the Douglas DB-7, the export version of the A-20 light twin-engine bomber. If American crews encountered aerial resistance, it would be one of the few times that American-built aircraft would engage each other in actual combat in the history of aerial warfare.

National Archives

**Lt. Mac Wordell, VF-41 XO (right), leads the squadron in song in the squadron ready room onboard Ranger before the start of Torch.**

## The Allied Lineup

The British fleet included seven carriers in three task forces to cover two landing areas along the North African coast. Five American flattops made up the Western Naval Task Force, led by *Ranger* (CV-4). The American force landed at Casablanca, while two British forces landed at Oran (Center) and Algiers (Eastern). The third British task force (Task Force H) covered operations in the Mediterranean, mainly to defend against any opposition from the Italians.

*Suwannee* (ACV-27) had a mixed air group of four squadrons: VGFs 27 and 28 and VGSs 27 and 30. *Sangamon* (ACV-26) had VGF-26 and VGS-26, while *Santee* (ACV-29) included VGF-29 and VGS-29. Another escort carrier, *Chenango* (ACV-28) ferried 76 U.S. Army Air Force P-40 *Warhawks* across the Atlantic for use once a beachhead had been established and the first enemy airfields secured.


National Archives

**A plane captain relaxes on the wing of 9-F-12, a Wildcat of VF-9. Note the strap from the pilot's harness spread over the cockpit sill.**

(The designation ACV (auxiliary aircraft carrier) preceded CVE (escort carrier). VGF (fighter) and VGS (scouting) squadrons embarked in ACVs.)

For most of the crews, this was their first combat operation, and apprehension and discussion went through all the ready rooms. Ashore, the French crews felt the same way. Many Frenchmen harbored resentment against the British, especially after "l'affaire de Mers-el-Kebir," where Royal Navy dive-bombers struck French ships in African ports in July 1940 to keep them from falling into German hands. However, there was no such feeling toward the Americans. Indeed, many Frenchmen hoped that they could soon join the U.S. forces against their German oppressors.

"How can the Americans think of fighting us?" the Vichy aircrews asked. "After all, we've been waiting for them for two years, and don't we fly many American aircraft? And are we not the descendants of the Escadrille Lafayette?"

Ironically, one of the Americans' potential opponents would be French fighter squadron GC II/5 at Casablanca. This squadron's insignia was the familiar American Indian's head first used by the Lafayette Escadrille in WW I, a squadron made up largely of American aviators and expatriates, who couldn't wait for their country to enter the war. It was going to be hard for everyone when the battle was joined.

Intelligence was not as complete as it should have been as far as the flight crews were concerned. Much of the information for aircrews came from travel brochures and *National Geographic*.

Vichy squadrons were spread along the coast, with Casablanca hosting a strong fighter force of *Hawk* 75As and Dewoitine 520s, considered the best French fighter. (A few had seen action against the Germans in 1940 and had acquitted themselves favorably against the vaunted Messerschmitt Bf 109.)

*Torch* represented the largest assembly of Allied ships and aircraft in

the war up to that time; however, the huge fleet was never intercepted by German patrols. The Germans believed that the Allied ships were headed for the beleaguered Mediterranean island of Malta.

The British carriers had a wide assortment of aircraft, ranging from biplane Fairey *Swordfish* and *Albacore* torpedo bombers to Grumman *Martlet* (the British name for the Grumman *Wildcat*), Hawker *Sea Hurricane*, and newly arrived Supermarine *Seafire* fighters. The Hawker and Supermarine aircraft were "navalized" variants of the highly successful land-based versions that had made such a name for themselves in the Battle of Britain. *Torch* would be the *Seafire*'s first combat operation.

## The Battle Is Joined

As the British fleet sailed through the Straits of Gibraltar into the Mediterranean on November 6 (the Americans stayed in the Atlantic), the carriers sent out fighter patrols to scout for any enemy aircraft. Aside from one or two French scouts, the British and American combat air patrols found the skies quiet as they approached the North African coast.

On Sunday, November 8, the first waves of American and British Army troops hit the beach at dawn. At first, French resistance was relatively light. Vichy shore batteries opened fire and were answered by the guns of the assembled surface ships. The French battleship *Jean Bart*, immobilized in Casablanca harbor, turned its 15-inch guns on the American landing force. The battleship *Massachusetts* sent a 16-inch shell into *Jean Bart*, jamming its one working turret.

As the battle progressed, French resolve strengthened and several Vichy destroyers and submarines sortied against the Allied forces outside the harbor. *Ranger*'s *Wildcats* and *Dauntlesses* bombed and strafed the French ships and targets ashore. They also engaged in unexpectedly intense aerial encounters with their French opponents. In the first battles, 16 Vichy fighters were shot down for the loss of four *Wildcats*. Even biplane Curtiss SOC liaison floatplanes contributed by breaking up a French tank column with depth charges using impact fuses. The SOCs flew from cruisers and battleships and usually carried messages and spotted for artillery.

On November 9, *Ranger* launched its three Army L-4 Piper *Cubs*, which would be used as observation platforms. The three little single-engine planes were led by Captain Ford E. Allcorn, who took off into a 35-knot headwind, 60 miles from shore, running into antiaircraft artillery from U.S. ships, which were obviously unaware of the identity of the three aircraft.

French shore batteries also fired at the Pipers as they went over the beach. Capt. Allcorn was wounded and his aircraft set on fire. He was barely able to sideslip his stricken plane to the ground, then drag himself from it before it exploded. He thus had the unique, and somewhat dubious, distinctions of flying the first *Cub* from an aircraft carrier, becoming the first Army aviator to be wounded in the campaign, and the first to be shot down in the campaign.

*Chenango* began launching its load of Army P-40s, most of which made it ashore. However, damage from the American and British air attacks was so great that the airfield at Port Lyautey had to be repaired. The remainder of the *Warhawks* flew ashore later.

National Archives

**Army Capt. Allcorn takes off from Ranger in his L-4.**

National Archives

**A Curtiss SOC is catapulted from a cruiser during Operation Torch.**

**Several American Navy aircraft stand on a Vichy airfield, perhaps Cazes, after the ceasefire. The SBD on the left is minus its vertical tail. Note the various ruts in the grass made by the aircraft**

The British Central Naval Task Force landed its assault troops at Oran on November 8, encountering little resistance except from French shore batteries. Royal Navy carriers *Furious*, *Biter*, and *Dasher* launched strikes against the airfield and dropped leaflets. *Sea Hurricanes* from *Biter* and *Dasher* shot down five French fighters.

The Eastern Naval Task Force attacked Algiers, also finding little or no resistance except for shore batteries. A quickly arranged ceasefire brought most of the fighting to an end in this area late on the 8th. By November 10 and 11, all the French forces had capitulated.

## Aerial Engagements

As the first waves of Americans hit the beach at Fedala (15 miles north of Casablanca), Mehdia (70 miles to the

### North African Landings

north), and Safi (140 miles south of Casablanca), *Ranger*'s VFs 9 and 41 orbited Cazes airfield. The French threat had to be clear before American aircraft went into action. However, as the *Wildcat* pilots saw several aircraft on the roll, Lieutenant Commander Tommy Booth, CO of VF-41, called, "Batter up!" In response to the prearranged signal, *Ranger* radioed, "Play ball!" The fight was on.

Although Cazes was a base for bombers and transports, there were several fighter squadrons on the field with Curtiss *Hawk* 75As and Dewoitine 520s. Most of the French aircraft sported one of the most colorful schemes ever applied to a large number of combat aircraft. There were variations but the basic markings were bright yellow-and-red striped cowlings and tails. The eye-catching colors contrasted dramatically with the dun-colored American *Wildcats* and SBDs that now ranged over the enemy airfields.

National Archives

**Not too much room as P-40Fs launch from Chenango. Besides the yellow-ringed national insignia, the Army fighters also carry American flags forward of the usual insignia.**

The dogfights over the Moroccan coast were fierce at any rate, and American Naval Aviators found themselves up against an experienced, wily foe. Many French pilots had seen combat against the Luftwaffe during the Battle of France; some were even aces. Their American opponents, while some had a relatively high number of flight hours, were all untested in combat. To an extent, this difference in operational experience offset the disparity between the *Wildcat* and the elderly *Hawk* 75A, although less so the D.520.

Two D.520s surprised Lieutenant (jg) Charles Shields of VF-41. However, the young pilot turned into the threat and dropped the lead French fighter. Hardly catching his breath, Shields spotted three more aircraft directly over the field. When he dove toward the trio, Shields found two *Hawks* pursuing a lone *Wildcat*, piloted by Lieutenant Chuck August. The two Americans turned the tables on the Vichy pilots, shooting both Curtiss fighters down.

After strafing the airfield with the last of his ammunition, Shields was bounced by four more *Hawks* and had to abandon his aircraft. As he hung from his chute, he was surprised then angry to see the *Hawks* lining up on him. They intended to shoot him while he hung helplessly in midair.

Desperate, Shields shot it out with his .45 pistol as the *Hawks* buzzed him, occasionally firing at the lone American. Neither side scored and Shields descended to the ground and capture. He was not alone. Several other Navy *Wildcat* pilots spent a few days as prisoners of war.

VF-9 also saw action. Lieutenant Commander Jack Raby led his squadron to Port Lyautey where they shot down a twin-engine Potez 63 – one of the many light-bomber/observation twins that the French produced in the late 1930s.

VGFs 26 and 27 had been in the same area and encountered several French fighters and bombers, shooting down several. Unfortunately, VGF-27 *Wildcats* attacked a Royal Air Force *Hudson* from Gibraltar, which they had wrongly identified as a French aircraft. The Lockheed twin crashed, with only one survivor of the four-man crew.

Lieutenant Commander Tom Blackburn of VGF-29 ditched his *Wildcat* after running out of gas trying to recover onboard *Santee*. It was an ignominious beginning to what would become an amazing combat career, albeit in the Pacific, with another type of fighter, the Vought F4U *Corsair*. Blackburn spent 60 hours in his life raft until a destroyer plucked him from the water. When he returned to his squadron, Blackburn, who had sent his junior pilots ashore before ditching, learned that four of his squadronmates had crash-landed and were captured.

As Lieutenant Malcolm Wordell, XO of VF-41, strafed an airfield, antiaircraft artillery hit his aircraft, wounding him. He crashed in a cow pasture and made his way to a "neighborhood" wineshop. The shop owner and wife ministered to the wounded American, plying him with rum.

Local infantry troops soon arrived to collect their prisoner. The corporal demanded Wordell's pistol, which the lieutenant reluctantly handed him, after requesting a receipt.

It had been a rough initiation for the untried fighter squadrons. The *Wildcats* had lost seven F4Fs to enemy action – fighters and flak – and 16 to operational causes.

National Archives

**29-GF-10 ran into trouble during a recovery onboard Santee. Note the control cables protruding from the fuselage, and the overlapping of the squadron numbers into the national insignia.**

National Archives

## The Dauntless in Action

SBDs from *Sangamon*, under Lieutenant Commander J. S. Tracy, flew over Fedala, while *Santee*'s *Dauntlesses* covered the landings at Safi, southwest of Casablanca. Several SBDs dive-bombed *Jean Bart* in Casablanca harbor, while others attacked the French destroyers that had managed to sortie from the harbor at 0800, intent on hitting the Allied troop ships offshore.

Accompanied by *Wildcats*, which did their best to strafe and disrupt the destroyers' defenses, the SBDs struck the Vichy ships. One SBD was shot down, the crew lost. It took several hours, and additional attacks by SBDs and the few TBF *Avengers* with the

American task force, to halt the determined enemy attack.

With all the landing forces ashore, aerial action on November 9 centered around supporting the Allied troops and ending whatever French resistance remained. VF-9's *Wildcats* found 16 *Hawks* and shot down five of the Curtiss fighters for the loss of one Grumman aircraft, whose pilot was rescued. VF-9 also lost three more fighters in the course of the day during strafing missions to Port Lyautey.

By the time an armistice was reached with the French authorities on November 11 – an appropriate date since it was also the date that an armistice ending WW I went into effect 24 years earlier – American *Wildcat* pilots had claimed 22 French aircraft, for the loss of five F4Fs in aerial combat. (The claim included one or two misidentified British aircraft, and the French actually admitted to losing 25 aircraft.) Fourteen *Wildcats* had been lost to operational causes. In total, 23 percent of all F4Fs in the American carrier force had been lost, a significant attrition rate. Captain C. T. Durgin, *Ranger*'s CO, visited Cazes on November 12. After meeting with the pilots from his air wing who had been captured, he remarked on the stout defense by the French: "If this battle had continued at the pace of the first day, I would have had to return to the U.S. for replacements."

The SBDs and TBFs of the Western Task Force had been in action throughout the operation, bombing enemy airfields and gun positions ashore. They also attacked whatever French ships ventured out of their harbors. However, the *Dauntless* and *Avenger* squadrons suffered relatively high loss rates. *Santee*'s squadrons lost four SBDs and seven TBFs in the four-day operation. Some of the losses were due to fuel starvation and piloting errors rather than direct enemy action.

On November 10, *Ranger*'s *Dauntlesses* made the final attack against the determined, but battered battleship *Jean Bart*, whose crew had returned one turret to operation. The SBDs scored two hits with 1,000-pound bombs and the French BB was out of the war for good. Nine *Dauntlesses* had been lost during *Torch*, most to operational causes.

Operation *Torch* began the final stages of expelling the Germans from North Africa. It also let the French know that they were not forgotten. *Torch* was also the first time the Allies used joint planning to forge a major operation, setting the pattern for future invasions, particularly the June 1944 invasion of Europe and amphibious operations in the Pacific. *Torch* also firmly established the aircraft carrier and its planes and crews in the close air support role, ready on arrival, and close to the action. ■

Cdr. Mersky is a naval reservist and assistant editor of *Approach* magazine.

### Aircraft Carriers and Squadrons of Operation Torch

**United States**

**Ranger (CV-4)**

| | |
|---|---|
| VF-9 | 27 F4F-4 Wildcats |
| VF-41 | 27 F4F-4 Wildcats |
| VS-41 | 18 SBD-3 Dauntlesses |
| | 1 TBF-1 Avenger |

**Sangamon (ACV-26)**

| | |
|---|---|
| VGF-26 | 12 F4F-4 Wildcats |
| VGS-26 | 9 SBD-3 Dauntlesses |
| | 9 TBF-1 Avengers |

**Suwanee (ACV-27)**

| | |
|---|---|
| VGF-27 | 11 F4F-4 Wildcats |
| VGF-28 | 12 F4F-4 Wildcats |
| VGS-27 | 9 TBF-1 Avengers |
| VGS-30 | 6 F4F-4 Wildcats |

**Santee (ACV-29)**

| | |
|---|---|
| VGF-29 | 14 F4F-4 Wildcats |
| VGS-29 | 9 SBD-3 Dauntlesses |
| | 8 TBF-1 Avengers |

**Chenango (ACV-28)**

76 USAAF P-40F Warhawks (launched)

**Britain**

**HMS Victorious**

| | |
|---|---|
| No. 809 Squadron | 6 Fulmar IIPs |
| No. 882 Squadron | 18 Martlet IVs |
| No. 884 Squadron | 6 Seafire IIBs |
| No. 817 Squadron | 8 Albacores |
| No. 832 Squadron | 8 Albacores |

**HMS Formidable**

| | |
|---|---|
| No. 885 Squadron | 6 Seafire IIBs |
| No. 888 Squadron | 12 Martlet IVs |
| No. 893 Squadron | 12 Martlet IVs |
| No. 820 Squadron | 12 Albacores |

**HMS Avenger**

| | |
|---|---|
| No. 802 Squadron | 6 Sea Hurricane IIs |
| Mo. 883 Squadron | 8 Sea Hurricane IIs |

**HMS Argus**

| | |
|---|---|
| No. 880 Squadron | 18 Seafire IIBs |

**HMS Furious**

| | |
|---|---|
| No. 801 Squadron | 12 Seafire ICs |
| No. 807 Squadron | 12 Seafire IIBs |
| No. 822 Squadron | 8 Albacores |

**HMS Dasher**

| | |
|---|---|
| No. 804 Squadron | 6 Sea Hurricane IIs |
| No. 891 Squadron | 6 Sea Hurricane IIs |

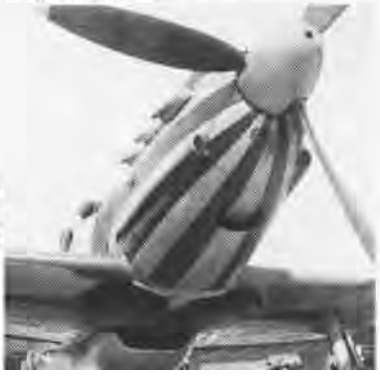
**HMS Biter**

| | |
|---|---|
| No. 800 Squadron | 15 Sea Hurricane IIs |

Musee de l'Air et de l'Espace

**Martin Maryland 167s. These fast reconnaissance bombers flew with both Armee de l'Air and Aeronavale squadrons.**

**An unusual view of two Dewoitine 520s of GC I/2.**



Armee de l'Air

**Vichy forces had a lot of Maryland 167s in 1941.**

Armee de l'Air

**Sud-Est Leo 451 four-place bombers equipped several squadrons of the Armee de l'Air and Aeronavale.**

Musee de l'Air et de l'Espace

**A pilot of GC III/3 by his Dewoitine 520.**

**Hawk 75As of GC I/5 over Rabat, Morocco, 1942.**

Musee de l'Air et de l'Espace

**This Douglas DB-7 crashed at Marrakech in March 1941.** Musee de l'Air et de l'Espace

# The Royal Navy's Fleet Air Arm in Operation Torch

**By Cdr. Peter Mersky, USNR**

While the Americans saw considerable action in the west, the British task forces were covering their own landings. Although these landings were relatively simple, the French mounted an active antiair campaign – at least for a few days.

Incongruously marked with pseudo-American markings – a white star on a blue circle, surrounded by a yellow ring – in a vain attempt to fool the defenders into thinking they were American, British aircraft made bombing attacks and fought several aerial engagements. The first British carrier strikes came at dawn when 42 aircraft launched against Vichy airfields at La Senia, Maison Blanche, and Tafaroui near Oran. *Albacores* struck La Senia and destroyed several hangars and 47 aircraft. The biplanes were intercepted by nine D.520s, which were engaged by *Sea Hurricanes* from HMSs *Biter* and *Dasher*. The escort claimed five French fighters destroyed, but the Vichy fighters had taken out three of the *Albacores* and flak hit another as the attackers began their dive. Half the force was gone.

One *Martlet* pilot landed to accept the surrender of a French garrison at Blida, after receiving permission from his superiors on the ship. The station commander promptly wrote out a surrender on a piece of note paper. American Army Rangers soon arrived to relieve the Royal Navy officer.

On November 8, six *Seafire IICs* of No. 885 Squadron from HMS *Formidable* found a Vichy *Maryland* bomber over Mers-el-Kebir and shot it down. *Seafires* from No. 807 Squadron (HMS *Furious*) engaged several D.520s and shot down three. Soon after this encounter, 807 Squadron was attacked by more

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FAA Museum

**A Fairey Albacore of 820 Squadron during North African landings in 1942.**

Dewoitines. The Royal Navy fighters climbed to meet the threat, and although low on ammunition, shot down another D.520 and damaged several others. It had been an auspicious opening for the *Seafires*.

*Seafires* flew armed escort and reconnaissance missions throughout the day. Two British pilots landed their *Seafires* near American columns. Sub-Lieutenant Peter Twiss – who would become a famous postwar test pilot – offered to fly short reconnaissance missions for a U.S. Army tank column, even though his aircraft had only about 50 gallons of fuel left.

Sub-Lieutenant P. J. Hutton crash-landed alongside another armored column and made his way to the U.S. Army Air Force's 31st Fighter Group, which had flown its *Spitfire VCs* into Oran at the end of the day. The next day, November 9, Hutton borrowed an American *Spitfire* and flew a mission before being ferried back to Gibraltar by a Royal Air Force *Hudson*. (American *Spitfires* were ferried, along with British aircraft, aboard British carriers to Gibraltar.)

The Royal Navy also tried to finish things up in Algeria. The task was made harder by the not-unexpected appearance of German and Italian bombers, which attacked the task forces offshore. *Martlets* and *Seafires* flew combat air patrol against these raiders who could do little to alter the outcome of the successful invasion.

At dusk on November 10, 15 German Ju.88s mounted an attack off Algiers but were intercepted by *Seafires* from HMS *Argus* and antiaircraft artillery from the task force ships. One small bomb managed to hit the carrier's after flight deck. While the hit did little damage to the deck itself, four valuable fighters were destroyed. The three *Seafires* in the air had to recover ashore.

Like the Americans, the Royal Navy suffered a high percentage of losses to operational causes rather than to direct enemy action. Indeed, 21 *Seafires* – 40 percent of those types available at the beginning of Operation *Torch* – were destroyed, only three to enemy action.

To add to the count, HMS *Avenger*, one of the escort carriers, was sunk by a torpedo from U-155, a German submarine that caught the carrier on the night of November 15 near Gibraltar. *Avenger* exploded; only 17 of her crew survived. ■

## 50 Years Ago – WW II

**Nov 1:** Patrol Wings were redesignated Fleet Air Wings, and to permit the organization of patrol aviation on the task force principle, the practice of assigning a standard number of squadrons to each wing was changed to provide for the assignment of all types of aircraft required by the wing to perform its mission in its particular area.

**Nov 2:** Naval Air Station, Patuxent River, Md., was established to serve as a facility for testing experimental airplanes, equipment, and material, and as a Naval Air Tranport Service base.

**Nov 16:** Naval Aviation's first night-fighter squadron, VMF(N)-531, was activated at MCAS Cherry Point, N.C., with Lt. Col. Frank H. Schwable in command. Initially training with SNJs and SB2A-4s, the squadron was assigned twin-engined PV-1s equipped with British Mark IV-type radar.

**Dec 27:** *Santee* (ACV-29), first of 11 escort carriers assigned to hunter-killer duty, sortied from Norfolk, Va., with Air Group 29 onboard for free-roving antisubmarine warfare and antiraider operations in the south Atlantic.

**Dec 31:** *Essex* (CV-9), Capt. D. B. Duncan commanding, was commissioned at Norfolk, Va. – the first of 17 ships of her class commissioned during WW II.

## Awards

**HSL-46** received three prestigious awards: **Chief of Naval Operations' Aviation Safety Award, ComNavAir-Lant Battle E**, and **Capt. Arnold J. Isbell Trophy**.

**AO1(AW) Scott Palumbo** of *Nimitz* (CVN-68) weapons department has been selected as the 1992 **John W. Finn Aviation Ordnanceman of the Year**. Petty Officer Palumbo was attached to NAS Whidbey Island, Wash., when nominated for the award which is named in honor of AOC (Lt.) Finn, a WW II Congressional Medal of Honor recipient for heroic action during the attack on NAS Kaneohe Bay, Hawaii, on December 7, 1941.

The recipients of the FY-91 **Secretary of the Navy Energy Conservation Awards** are: Large Ship, *Forrestal* (CV-59); Squadron, VA-65; and Industrial, NADep Jacksonville, Fla.

The winner of the FY-91 **Secretary of Defense Maintenance Award** in the large command category is *America* (CV-66).

**Lt. Michael R. Croskey** of VS-33, received the first **IBM S-3 Electronic Warfare (EW) Excellence Award** for the Pacific Fleet. The EW award will be given annually to the naval officer on each coast who does the most to further the tactics or employment of electronic warfare assets in the S-3A or S-3B aircraft.

The 1992 **Captain Edward F. Ney and Major General W. P. T. Hill Memorial Awards Program for Food Service Excellence** winners: First Place Ashore: Reserve, NAF Washington, D.C.; First Place Afloat: Large, *Belleau Wood* (LHA-3) and Aircraft Carrier, *Ranger* (CV-61).

**ADAN Dirk G. Hoogland** was presented the Navy and Marine Corps Medal for heroism while serving as a CH-53E aircrewman assigned to HC-4 aboard USNS *John T. Lenthall* (T-AO-180) on May 9. The medal is the highest award for a peacetime act.

Hoogland was supervising and assisting in the offloading of cargo from the rear of a helicopter, and coordinating the efforts of a team of 10 personnel. The aircraft vibrated severely, snapping two of the tie-down chains. Hoogland immediately began to grab all personnel working beneath the aircraft and force them towards the safety of the ship's deck house. The helo's rotor blades severed the tail-rotor pylon, scattering debris around the flight deck.

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

## Records

**Cdr. J. P. Avveduti** of HS-3 surpassed 4,000 flight hours as a Naval Aviator. He has logged flight time in the T-28, TH-1L, UH-1N, SH-3D, SH-60F, and HH-60H.

**Lt. Fred Kilian** recorded his 3,000th flight hour in the F-14A during VF-111's air wing detachment to NAS Fallon, Nev., in June.

**Saratoga** (CV-60) completed her 350,000th arrested landing in July.

**Cdr. Chuck Wyatt, CO, and Cdr. Skip Sayers, XO, of VF-74 simultaneously bagged their 1,000th Tomcat traps on July 9 while embarked aboard Saratoga (CV-60) during Med deployment 2-92.**

Several units marked **safe flying time.**

| Unit | Hours | Years |
|---|---|---|
| HC-4 | 24,000 | 9 |
| HC-8 | | 1 |
| HSL-34 | | 3 |
| HSL-36 | | 3 |
| HSL-4 | | 26 |
| HSL-46 | 25,000 | 3 |
| HSL-48 | | 3 |
| HSL-94 | | 2 |
| NAS Brunswick | | 32 |
| NAS Glenview | | 21 |
| NAS Jacksonville | | 13 |
| VA-65 | 35,000 | 9 |
| VA-75 | 28,368 | 6 |
| VAQ-35 | 1,600 | 1 |
| VAQ-132 | 36,700 | 22 |
| VAW-88 | 29,962 | 22 |
| VAW-112 | 40,300 | 19 |
| VC-10 | 7,700 | 4 |
| VF-24 | 38,428 | 10 |
| VF-31 | 20,536 | 6 |
| VF-33 | | 5 |
| VF-43 | | 4 |
| VF-84 | 7,362 | 2 |
| VF-201 | | 2 |
| VF-202 | | 9 |
| VF-213 | 3,042 | 1 |
| VF-302 | 17,763 | 6 |
| VFA-25 | 68,264 | 16 |
| VFA-83 | 31,000 | 7 |
| VFA-151 | 11,800 | 3 |
| VFA-195 | 40,000 | 10 |
| VMFA-451 | 60,000 | 15 |
| VP-1 | 53,900 | 9 |
| VP-22 | 82,460 | 13 |
| VP-45 | 150,000 | 23 |
| VPU-2 | 26,230 | 9 |
| VQ-1 | 30,000 | 5 |
| VQ-3 | 130,450 | 15 |
| VS-21 | 13,800 | 4 |
| VS-37 | 40,000 | 40 |
| VXN-8 | | 25 |

## Adieu JOCS Cornfeld

It is with regret that *NANews* bids farewell to JOCS Barbara A. Cornfeld, who retired in November after a naval career of more than 25 years. The staff wishes her good luck in her new life in California, and envies her chance to sleep late in the mornings.

## Harry Gann Retires

**Harry Gann** is one of the finest aerial photographers in the aviation field. Harry, who went to work for Douglas Aircraft Company in 1954 as an engineer, retired from McDonnell Douglas in September. It is difficult to

imagine the world of aviation photography without his visual signatures. Happy "contrails" to you, Harry.

## Rescues

Members of **Det 3 of HSL 46** executed a rescue in the Adriatic Sea. Lts. James Churbuck and Daniel Rothenberger and AW2 Timothy Kline were conducting a surface surveillance mission in the early morning of August 2 when they received word that a crewman had fallen overboard from *Saratoga*. They maneuvered the SH-60B *Seahawk* helo into a low altitude search astern of the ship and quickly located the lost crewman. Lts. Churbuck and Rothenberger executed an automatic approach to a doppler hover, while AW2 Kline directed the pilot to the survivor and lowered the rescue hook. After safely hoisting the survivor, he was returned to *Saratoga*. For their efforts, the crew of "Cutlass 464" were presented Navy Commendation Medals.

A P-3 *Orion* from NAS Moffett Field, Calif., responded to a request from the Search and Rescue Coordinating Center in San Francisco to assist Coast Guard aircraft in locating the crew of the fishing trawler *Tootur*, approximately 120 miles south of the Baja California coast.

Within one hour, an aircrew from **VP-46** was airborne. They picked up radio signals from a marker beacon left by the departing Coast Guard C-130 and homed in on the signal until radar contact was made with the abandoned fishing boat.

After locating the survivors aboard a life raft, the P-3 crew dropped smoke markers. As strong winds and high seas from Hurricane Darby made smoke markers difficult to see, the crew employed the P-3's sophisticated sensors to good advantage by dropping sonobuoys and using the on-top position indicator to maintain contact with the raft's position.

The patrol plane stayed on station while another Coast Guard C-130 was en route from the San Francisco Bay area. Five minutes after checking on station, the C-130's crew had visual contact with the raft and survivors. Early the next morning, the 10 crew members of *Tootur* were picked up by a merchant ship that had been diverted to their position and transported to Panama.

## Scan Pattern

PH2 J. A. Perez

**A T-2 prepares to launch off the deck of Forrestal (AVT-59) while A-6s and FA-18s wait on the sideline. With her redesignation as an auxiliary aircraft landing training ship, Forrestal still traps the best aviators in the world – whether they are soon-to-be pilots in flight training or fleet pros updating their qualifications.**

**Everett Alvarez**, the longest held prisoner of war in North Vietnam, helped open the second General Assembly of YMCAs on July 4 in Anaheim, Calif. Alvarez wrote *Chained Eagle*, a book which recounts his experiences during the war (see *NANews*, Mar-Apr 90).

He is currently on the national board of the Armed Services YMCA, which serves people in the U.S. military, with an emphasis on young enlisted personnel and their families. In 1991, on 20 military installations, the Armed Services Y offered social services to more than 500,000 people.

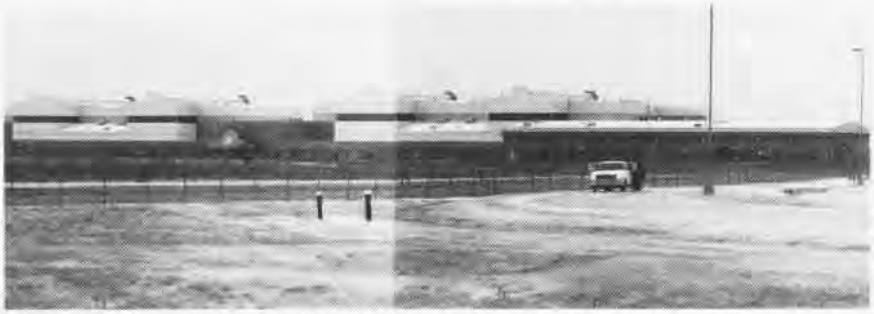
The establishment of Strategic Communications Wing 1 in May signaled the consolidation of the Navy's two TACAMO squadrons, VQ s 3 and 4, and their transition to Tinker AFB, Oklahoma City, Okla.

A newly restored Grumman F6F *Hellcat* was unveiled at the **New England Air Museum** in Windsor Locks, Conn. The *Hellcat* is on permanent loan to the museum from the Navy. Under restoration for nearly 18 years, it has been refurbished to like-new condition and is now on permanent display.

**One of the remaining 24 examples of the F6F rests majestically in the New England Air Museum.**

PH2(AW) Troy D. Summers

**Lt. Wes Nielsen lands "Salty Dog 121," an FA-18 Hornet strike fighter from NAWC AD Patuxent River, Md., aboard George Washington (CVN-73). This marked the first arrested landing aboard the new Nimitz-class aircraft carrier. The ship was undergoing fixed-wing flight deck certification operations off the coast of Virginia.**



Ltjg. Marc A. Rzepczynski

**Front view of the Navy's new TACAMO facility at Tinker AFB, Okla.**

## Anniversary

**Naval Air Technical Training Center**, Memphis, Millington, Tenn., celebrated 50 years of enlisted aviation training on September 23.

## In Memoriam...

**Admiral Frederick H. Michaelis, USN (Ret.)** 75, died of cancer August 13 in Walter Reed Hospital. A Naval Academy graduate, he received his wings in 1943 and served during WW II. After fighter squadron and carrier tours, including command, he became Assistant Chief of Naval Operations (Air) from August 1968 to September 1969. Next, he was Director, Joint Strategic Planning Staff at Offutt AFB, Neb., followed by Commander, Naval Air Force, U.S. Atlantic Fleet. His last active duty position held from 1975 to 1978 was Chief of Naval Material. He retired on October 1, 1978.

Two recent honors accorded Adm. Michaelis were his selection to carrier aviation's Hall of Fame on USS *Yorktown* in Charleston, S.C., and the naming of the new academic building at the "Top Gun" fighter school, NAS Miramar, Calif., "Michaelis Hall."

**Paul E. Garber**, 93, died September 23 in Arlington Hospital in Virginia. Garber, who acquired most of the prize airplanes for the Smithsonian Institution's world-renowned aeronautical collection, was the first curator of the Smithsonian's National Air Museum. In 1928, he was on hand at Bolling Field, D.C., to take delivery of Charles Lindbergh's *Spirit of St. Louis* after its historic solo flight across the Atlantic.

In 1980, the Smithsonian's National Air and Space Museum renamed its Silver Hill storage facility in Prince George's County the "Paul E. Garber Preservation, Restoration and Storage Facility" in his honor.

Garber was historian emeritus and Ramsey Fellow of the Smithsonian's National Air and Space Museum. He was awarded the Smithsonian's Gold Medal for Exceptional Service and, in 1985, was designated Honorary Naval Aviator No. 16.

## Flag Moves

**RAdm. (Sel) Phillip S. Anselmo**, from Dir., Aviation Plans and Requirements Div., N-880, OPNAV, to Deputy, Air Warfare, N-88B, OPNAV, Oct 92.

**RAdm. Thomas A. Mercer**, from Commander, U.S. Facility, Subic Bay, R.P., USCinCPacRep Philippines, to Superintendent, Naval Postgraduate School, Monterey, Calif.

**RAdm. Paul W. Parcells**, from Commander, Tactical Wings, Atlantic, to Commander, Fighter Airborne Early Warning Wing, U.S. Pacific Fleet, Jul 92; Naval Postgraduate School, Monterey, Calif., Dec 92.

**RAdm. (LH) Robert J. Spane**, from Commander, Carrier Group Eight, to Dir., Aviation Plans and Requirements Div., N-880, OPNAV, Sep 92.

## Change of Command

*America*: Capt. William W. Copeland, Jr., relieved Capt. Kent W. Ewing.

*Blue Angels*: Cdr. Robert S. Stumpf relieved Capt. Greg Wooldridge.

CWV-7: Capt. S. H. Baker relieved Capt. J. C. Sherlock.

FltLogSupWing: Capt. Mike King relieved Capt. Robert D. McKenzie.

HC-2: Cdr. Roy A. Merrill III relieved Cdr. John L. Dailey, Jr.

HelSeaConWing-3 (later HSCW-1): Capt. William C. Turville, Jr., relieved Capt. R. Timothy Ziemer.

HelWingsLant: RAdm. Frank M. Dirren, Jr., relieved RAdm. Joseph W. Walker.

HMH-363: Lt. Col. Mark T. Beck relieved Lt. Col. Daniel C. Spurlock.

HS-12: Cdr. Daniel C. Simonds relieved Cdr. Timothy A. Meyers.

HSL-32: Cdr. Frank A. Verhofstadt relieved Cdr. Joseph E. Belinski.

HSL-44: Cdr. David R. Lopez relieved Cdr. J. Kevin Moran.

MAG-46: Col. Andrew S. Dudley, Jr., relieved Col. T. D. Seder.

MALS-11: Lt. Col. William J. Powell relieved Lt. Col. John J. Moyer.

MATSG Pensacola: Col. Michael J. Cross relieved Col. William L. Nyland.

MATSG Whidbey Island: Col. Paul E. Hanover relieved Col. John M. Suhy.

NADep Norfolk: Capt. Bruce A. Pieper relieved Capt. Thomas W. Hancock.

NADep Pensacola: Capt. Spencer E. Robbins II relieved Capt. Robert L. Jordan.

NAF Atsugi: Capt. John W. Curtin relieved Capt. William A. Roop.

NAS Corpus Christi: Capt. Ken Bixler relieved Capt. Ben Liner.

NAS Oceana: Capt. John W. Craine, Jr., relieved Capt. Lawrence W. Urbik.

NAS Patuxent River: Capt. Roger D. Hill relieved Capt. Donald A. Wright III.

NAS Pensacola: Capt. William T. R. Bogle relieved Capt. Richard J. Burns.

NATMSAct: Capt. Olen Akins relieved Capt. David Timmons.

NavAiRes Norfolk: Capt. Robert F. Sandweg relieved Capt. John Wytsma.

StrkFightWpnScoLant: Cdr. Gregory Malinak relieved Cdr. John Hoffman.

TraWing-4: Capt. Steven Hannifin relieved Capt. George Wilson, Jr.

VAQ-135: Cdr. George L. Wood relieved Cdr. Albert A. Miller.

VAQ-136: Cdr. Larry J. Stack relieved Cdr. Richard C. Perkins.

VAW-115: Cdr. Dick Mauldin relieved Cdr. Terry Jobe.

VAW-121: Cdr. Larence E. Tant relieved Cdr. Mark F. Klauss.

VF-33: Cdr. Anthony R. Reade relieved Cdr. Larry H. Schmidt.

VF-126: Cdr. J. P. Bergamini relieved Cdr. P. C. Chisholm.

VF-142: Cdr. Gene W. Garrett relieved Cdr. Richard K. Gallagher.

VFA-15: Cdr. Joseph Capalbo relieved Cdr. Steven Kunkle.

VFA-82: Cdr. Deak Childress relieved Cdr. Elmer Standridge.

VFA-94: Cdr. John W. Goodwin relieved Cdr. Kenneth M. Linn.

VFA-106: Cdr. Michael T. Anderson relieved Capt. James Barry Waddell.

VFA-192: Cdr. Timothy Heely relieved Cdr. J. B. Godwin.

VMA-214: Lt. Col. Henry Joe Coble relieved Lt. Col. Ronald V. Deloney.

VMA-513: Lt. Col. William F. Bain relieved Lt. Col. Charles S. Patton.

VP-1: Cdr. Raymond B. Bowling relieved Cdr. James J. Miller.

VP-5: Cdr. Lawrence S. Cotton relieved Cdr. Robert D. Whitmire.

VP-11: Cdr. Alex Hill relieved Cdr. John P. Horsman, Jr.

VR-24: Cdr. Allen M. Murphy relieved Cdr. Jack D. Punches, Jr.

VS-27: Cdr. Stan Greenawalt relieved Cdr. James Renninger.

VT-7: Cdr. Stuart A. Ashton relieved Capt. Kenneth M. Peters.

VT-22: Cdr. Charles W. Nesby relieved Cdr. (Capt. Sel.) Paul E. Brien.

VT-28: Cdr. William A. Racette, Jr., relieved Cdr. Glenn C. Powers.

By Cdr. Peter Mersky, USNR

Tillman, Barrett. *Dauntless: A Novel of Midway and Guadalcanal*. Bantam Books, 666 Fifth Ave., New York, NY 10103. 1992. 412 pp. $20.

No one has ever tried to write more than a passing fictional account of the pivotal Battle of Midway or of the air campaign over Guadalcanal. These actions usually appear as interesting historical footnotes in a larger story. Thus, in this 50th anniversary year of these Pacific engagements, Barrett Tillman's novel, appropriately dedicated to Ed Heinemann, designer of the SBD *Dauntless*, is welcome.

The author is certainly qualified to write such a book. His biographies of the major Navy and Marine Corps aircraft of the war, including that on the SBD, are standards and he has written many magazine articles. In this, his third novel, Tillman has come a long way in transitioning from a highly respected historian to an up-and-coming historical novelist.

With the author's credentials, the reader can take for granted *Dauntless*'s historical soundness. Tillman tries to flesh out the story with the human aspect. Besides the main character, SBD pilot Ensign Phil Rogers, there is a host of major and minor supporting personalities coming from all walks of life and levels of the service – including the Navy, Marine Corps, and the Japanese.

Writing exciting wartime fiction based on well-known events and personalities is very hard, and the author generally succeeds. His association with several Navy and Marine Corps aviators of the period, including several personalities who make cameo appearances in the narrative, lets him give us a glimpse of some of these fabled characters and how they fit into the overall story. For example, VMF-223 skipper John Smith is just as tough and capable as we would expect him to be.

The author chose the title not only to describe the main aircraft but also to describe the characters of all the participants, friend and foe, the men who flew the SBD, and perhaps the men who fought against her.

*Dauntless* is a good read and ends with an obvious setup for a follow-on novel to tell the characters' stories as they go through the war.

Lambert, John W. *Wildcats Over Casablanca*. Phalanx Publishing Co., Ltd., 1051 Marie Ave., St. Paul, MN 55118. 1992. 44 pp. Ill. $11.95.

Readers with long memories or a deep knowledge of WW II American Naval Aviation may recall this 1943 book, written by another author and published by Little, Brown and Co. Some confusion may, therefore, be expected when reading advertisements for Phalanx's new volume with the same title. At first, I thought that some enterprising publisher had resurrected the 50-year-old book for the 50th anniversary of Operation *Torch*. I was surprised when this edition arrived with barely one-eighth of the original's length.

The publisher explained that the original book was restricted by wartime censorship. It also included a lot of material on the experiences of those U.S. Navy pilots who were shot down and captured. The publisher wanted to limit its edition to the aerial action and decided to forego the POW material. Little, Brown and Co. had relinquished claim to the title and the material long ago, and Phalanx was free to print the book in any format.

The reader will be rewarded by this deceptively slim volume. There is much of the original book's first-person accounts of the aerial engagements between the Navy and Vichy fighters. John Lambert has corrected several wartime inaccuracies and identified people and squadrons that were left obscured 50 years ago. He has also included many photos taken by combat photographers that weren't available at the time.

There are four excellent illustrations by artist John C. Valo – one painting of a low-level engagement, and three color profiles of the principle Navy and French fighters. These profiles show their subjects in accurate shades of weathered color, along with the exhaust stains that give veteran aircraft so much character.

If you can find an example of the earlier book in a large city library, I recommend reading both editions. The current title is, however, a fine effort by a small, energetic new publisher.

## ANA Bimonthly Photo Competition

**The winner of the bimonthly ANA Photo Contest was this shot of a VFA-97 FA-18A Hornet preparing to land aboard Kitty Hawk (CV-63) while the carrier was underway in the Pacific in May 1992. The photo credit on the back of the photograph reads only "Lamont." The photographer should contact ANA to collect the $100 cash award.**

## The Association of Naval Aviation Photo Contest

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.

## Oops

On page 11 of *Naval Aviation News*, Jul-Aug 92, the caption on a photograph of a group of ships, including three aircraft carriers, identified the lead ship as *Saratoga* (CV-61). While *Saratoga* has long been a leader, her hull number is CV-60. Elsewhere in this issue, *Saratoga* is correctly identified. It's always a pleasure to read *Naval Aviation News*.

RAdm. V. G. Lambert, USN (Ret.)
1169 Castro Road
Monterey, CA 93940

**Ed's note: Thanks for catching our typo.**

## Kudo

May I take this opportunity to congratulate you on the excellence of your magazine. We receive at our library more than 100 different publications, all aviation related. *Naval Aviation News* is, for more than five years now, by far the most informative publication; it is quite an achievement in such restricted space. Keep up the great job.

S. Nicolaou
Musee de l'Air et de l'Espace
BP 173 93350 Le Bourget France

## Women in Naval Aviation

Congratulations on the fine Sep-Oct 92 issue on women in Naval Aviation. There is no doubt women have made a significant contribution to the Navy. However, I couldn't help notice that the reserve C-9 community was left out of aircraft flown. Nearly every C-9 has a female crew member onboard serving as a pilot, crew chief, loadmaster, or flight attendant. I can personally attest to their dedication and professionalism, and they are key players in the Navy's logistics support capability.

Cdr. Mark Danielson
Aviation Safety Officer, Code 021
NAS Dallas, TX 75211

**Ed's note: The table "Naval Aircraft Flown by Navy Women" on page 14 should have included the C-9B twin-jet transport, which is also currently flown by six women in VR-56, NAS Norfolk, Va.**

I just received the Sep-Oct 92 *Naval Aviation News*, and I want to bring to your attention the omission of a stellar female Navy officer in Naval Aviation.

Referring to your page 19 chronology: in May 1976, Lt. Sharon Gurke (nee McCue) was selected as the first woman Aviation Maintenance Duty Officer (1520). In 1982, she was the first woman selected to be in charge of an aircraft intermediate maintenance department (NAS Alameda), followed in 1984 by running the AIMD at NAS Rota, Spain.

More recently, now-Capt. Sharon Gurke was the first woman in Naval Aviation selected for a major aviation shore command, Naval Aviation Depot, Pensacola, Fla., where she is currently the XO.

Capt. L. S. Gurke
CO, USS Normandy (CG-60)
FPO AE 09579-1180

**Ed's note: We apologize for the omission. As stated at the end, the chronology lists most highlights; it is not intended to be inclusive.**

Excellent job on the Sep-Oct 92 issue. It was refreshing that you did not take a patronizing perspective. The barriers are coming down; sexism, like racism and religious prejudices, is just another form of focusing on the externals – on *what* the person is, instead of *who* the person is. As you clearly point out repeatedly in the articles, any job a woman can do she should be permitted equal access to do. However, you did not do anyone any favors by putting the picture on the cover of a *person* wearing a ring while working on the flight deck.

LCdr. Barry A. Wayne, MC, USNR (FS)
VX-4
NAWS Point Mugu, CA 93042

**Ed's note: According to the Naval Safety Center, Norfolk, Va., it is "strongly recommended that flight deck personnel not wear rings, but it is not an official violation of NATOPS (Naval Air Training and Operating Procedures Standardization) or safety regulations.**

I had no sooner sent my column to *World Airshow News* than I received the Sep-Oct 92 issue of *Naval Aviation News*. My column was about the real possibility of a female demonstration pilot in either the *Blue Angels* or the *Thunderbirds* in the near future. I have met female Naval Aviators at Patuxent River, Md.; Norfolk, Va.; and other airshows. One was in the Test Pilot School, flying an F-4; one was flying a helo; and one was VC-5's top aggressor pilot at the time. Damned fine pilots who could outfly me in their sleep.

As a columnist for *WAN*, an airshow announcer and production designer, and an actor and member of Tailhook, *NANews* contains scads of information that I can use, and makes for some fine reading.

F. K. Smith
2 Heathbrook Road
Merrimac, MA 01860

**Ed's note: Thank you for the kind words. Let me take this opportunity to also thank the others who commented favorably on our issue featuring women in Naval Aviation.**

## Reunions, Conferences, etc.

**Shamrock Bay (CVE-84) reunion,** NOV 5-7, Meridian, MS. POC: Fred Griggs, 1989 Dandy Rd., Dallas, GA 30132, 404-445-4770.

**Naval Aviation Cadets Classes of 1935-45 reunion,** NOV 5-8, Hot Springs, AR. POC: Larry Eckard, PO Box 5145, Hickory, NC 28603.

**Nimitz (CVAN/CVN-68) reunion,** NOV 5-8, Jacksonville, FL. POC: Larry Eckard, POB 5145, Hickory, NC 28603, 704-256-6274.

**Vietnam Veterans Memorial 10th anniversary,** NOV 7-11, Washington, DC. Navy and Marine families welcome for reading of names on "The Wall," religious activities, reunions, 1960's music concert, and exhibition of art by Vietnam vets. POC: Vietnam Veterans Memorial Fund, Inc., 815 15th St. NW, Suite 601, Washington, DC 20005, 202-393-0090.

**Navy Armament Test/Aircraft Armament Unit reunion,** NOV 12-15, Pensacola, FL. POC: W. F. Culley, 206 N. 59th Ave., Pensacola, FL, 904-456-5617.

**Okinawa (LPH-3) decommissioning ceremony** (invitation only), DEC 17, San Diego, CA. Former crewmen may contact LCdr. Jay Higgins, 619-556-4173.

**VF-11 reunion,** JAN 30-31, NAS Miramar, CA. POC: LCdr. P. M. Pompier, VF-11, NAS Miramar, CA 92145, DSN 577-1211/4878 or 619-537-1211/4878.

## Corrections

**NANews, Sep-Oct 92:**

**Inside front cover and p. 1 – Captions, Forrestal's hull number is AVT-59 vice AVT-16.**

**Page 11 – Hull numbers are not "transferred" from one ship to another. Members of the USS Gambier Bay (CVE-73)/Squadron VC-10 Association passed on their goodwill and ship's heritage to Washington (CVN-73) at her commissioning.**

**Page 14 – The unknown female flight deck member in bottom photo is not Lt. Erichsen.**

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