

Joint EA-6B Program Under Way

The first Air Force pilots and electronic warfare officers (EWOs, counterparts to the Navy's electronic countermeasures officers) have taken their places in Tactical Electronic Warfare Squadron (VAQ) 129, NAS Whidbey Island, Wash. Six Air Force pilots and 18 EWOs are scheduled to receive EA-6B training, qualify for carrier landings, and join five newly formed joint-service EA-6B *Prowler* land-based expeditionary squadrons over the next two years. These squadrons are being activated to fill the gap left by the ongoing phaseout of the USAF's EF-111. VAQs 133, 134 and 137 have already been established; stand-ups of VAQs 142 and 128 are planned for April and October 1997, respectively. Each expeditionary squadron will be assigned at least four aircraft and will have about 27 officers and 147 enlisted.

Landing System Tested

Testing of an Improved Fresnel Lens Optical Landing System (IFLOLS) is nearing completion. The new system is taller and has 12 lenses (7 more than the original), which are clearer, crisper and visible from a greater distance than the ones currently used in the fleet, giving pilots more time to adjust their approaches. It has built-in test and monitoring capabilities, a fiber-optic link to the power source that can be rerouted in the event of a failure, and 12 circuit boards—compared to 200 in the earlier system—for greater reliability.

Three systems were built for the testing phase. One is undergoing physical testing (such as vibration, durability and maintainability) at NAS Lakehurst, N.J. A second unit, installed at NAS Patuxent River, Md., was tested by fleet and test pilots flying day and night field car-



Vernon Pugh

Above, the Improved Fresnel Lens Optical Landing System (right) was tested against the standard system at NAS Patuxent River, Md. Right, RAdm. Glenn Phillips, Deputy Commander for Operations, NAVAIRSYSCOM, examines the new system.



Roger LeJeune

rier landing practices. This land-based unit was moved to Naval Auxiliary Landing Field, Fentress, Va., in December 1996, to be tested by U.S. Naval Test Pilot School pilots in various aircraft. These pilots will then continue testing aboard *George Washington* (CVN 73)—on which the third unit was installed in December 1996—prior to IFLOLS operational use.

Sea Knight Weapons System Trainer

Upgraded CH-46E *Sea Knight* Weapons System Trainers (WST), currently installed and being tested at MCAS Tustin, Calif., and MCAS New River, N.C., promise to provide pilots with more realistic training scenarios. The WSTs use eight central processing units, each with four gigabytes of memory. A new visual system developed by Lockheed Martin projects views developed from satellite imagery—including life-like representations of manmade and natural structures—which are of such quality that nap-of-the-earth and night vision goggle flights can

be practiced. Representations of other aircraft and naval vessels are also more accurate. In addition to providing numerous computer-generated threats, the CH-46E WSTs can be linked to other simulators for realistic air combat maneuvering against other pilots.

Orion Launches SLAM

The first guided launch of a Standoff Land Attack Missile (SLAM) from a P-3C *Orion* took place at Point Mugu, Calif., on 12 September 1996. The launch—executed by a Naval Force Aircraft Test Squadron *Orion* from Naval Air Warfare Center Aircraft Division, Patuxent River, Md.—culminated extensive tests of the missile and other integral components of the P-3C weapons system, in preparation for eventual fleet integration of the SLAM into the *Orion's* armament inventory. The AGM-84E SLAM incorporates an imaging infrared seeker head, a digital weapon data link unit and a global positioning system (GPS) unit with an integral navigation processor. The Real Time



The Naval Force Aircraft Test Squadron crew and program personnel accomplished the first guided launch of a Standoff Land Attack Missile at the Naval Air Warfare Center Weapons Division, Point Mugu, Calif., on 12 September 1996.

Mission Planning System, consisting of a computer, controller and a portable GPS receiver, was also used for the first time to provide prelaunch mission planning of the missile.

enabling the MA-31 to fly 45 miles at a speed of Mach 2.5 while skimming the ocean. The MA-31 was fired from *Gonzalez* (DDG 66) during trials in Puerto Rico in November 1996.

MA-31 Test Fired

Naval Air Warfare Center Weapons Division, Point Mugu, Calif., continued testing the MA-31 candidate target with three live launches. Based on the Russian AS-17 air-to-surface missile, the MA-31 is being developed by McDonnell Douglas along with a Russian contractor as a cost-effective, high-speed, sea-skimming target. Developers are working toward

NPS Brings Classroom to Fleet

Active duty helicopter pilots of Light Helicopter Antisubmarine Squadron 41, NAS North Island, Calif., are taking advantage of the opportunity to attend the Naval Postgraduate School (NPS), Monterey, Calif., without leaving their command. This "pilot" program uses interactive video teleconferencing to

instruct mission-critical officers who cannot leave their billets to attend the NPS full time. For the \$45,000 average annual training cost for one on-campus student, the NPS can equip an entire off-site classroom that can accommodate a large number of students. Depending on the success of this fledgling program, long-distance learning may soon be coming to a station near you.

The Naval Postgraduate School's long-distance learning program uses video technology to reach students off campus.



Flight Bonuses Announced

Some aviators at the rank of lieutenant commander and below with at least 6 and no more than 13 years of experience are eligible for flight bonuses beginning in FY 97. The bonuses are \$9,000 for EP-3 pilots; \$10,000 for SH-60F and SH-3H pilots; and \$12,000 for C-130 pilots (including Training and Adminis-

A Naval Weapons Test Squadron QF-4N Phantom II fires an MA-31 target.



tration of Reserves personnel); EA-6B, F/A-18, F-14, E-6A and S-3 pilots; and EP-3 and EA-6B Naval Flight Officers. Aviators must apply for continuation pay before 31 January, with their commanders' approval. Refer to NAVADMIN 250/96 for other requirements.

JSF Competition Narrows



Boeing (above) and Lockheed Martin (below) advance to the next round of the JSF competition.



On 16 November 1996 McDonnell Douglas' tailless proposed design was removed from the Joint Strike Fighter (JSF) competition. The remaining two competitors, Boeing and Lockheed Martin, were both awarded contracts for the JSF Concept Demonstration Program, which will feature flying aircraft demonstrators, ground and flight technology demonstrations, and continued refinement of the contractors' weapon system concept. This phase is expected to be completed by February 2001.

NAWCAD Tests Crane

The Naval Air Warfare Center Aircraft Division Platform Support Equipment Evaluation and Verification Branch, NAS Patuxent River, Md., achieved a first on 23 October 1996. The newly updated Carrier Vessel Crash and Salvage

Crane (CVCC), the A/S32A-35, which is nearing completion of its test program, was used to successfully lift the F/A-18F as a part of the *Super Hornet's* carrier suitability tests. The newer CVCC features a new digital drive system, which should be more reliable than the motor-drive systems currently in use in cranes throughout the fleet.

Mishaps

An AV-8B *Harrier* of Marine Attack Squadron 211 crashed about 60 miles northwest of Yuma, Ariz., on 7 October 1996 during a training mission. The pilot, Capt. Dale W. Mulkey, USMC, was killed.

A T-2C *Buckeye* crashed during a training flight at NAS Meridian, Miss., on 10 October 1996. The student pilot, 1st Lt. Michael Warda of Training Squadron 23, was killed.

An HH-60H *Seahawk* of Helicopter Antisubmarine Squadron 15 on board *Enterprise* (CVN 65) crashed 25 October 1996 in the northern Persian Gulf during a routine training mission. Nine survivors were recovered. Pilots LCdr. Jeffrey Hilliard and Lt. Robert Wood, Jr., and Sea-Air-Land Team 8 member AW1 Steven Voight were killed.

A T-34C *Turbo-Mentor* from Training Squadron 4, NAS Pensacola, Fla., crashed on 2 December 1996 at Maxwell AFB, Ala., during a training exercise. The instructor, Capt. William R. Grace, USAF, and the student pilot, Italian Air Force 2nd Lt. Massimiliano Belvisi, were killed.

A Marine Corps F/A-18C *Hornet*

crashed during a night landing on *Abraham Lincoln* (CVN 72) in the North Pacific on 4 December 1996. Capt. Christopher Hodges of Marine Fighter Attack Squadron 314 was not seriously injured.

Contract News

Sanders, a Lockheed Martin company, has received an \$18.9 million contract to upgrade the USQ-113 communications jammer on the EA-6B *Prowler*. The upgrade will consist of new receivers, power amplifiers and transmitters to extend the frequency range of the system; a new liquid crystal display; and a signal recognition device. Sanders will develop three preproduction systems during the initial development phase and upgrade 30 existing USQ-113s beginning in July 1997.

Litton has been awarded a contract to provide replacement navigation systems for all Navy P-3 *Orions* and C-130 *Hercules* aircraft. Two systems will be installed in each aircraft, combining laser gyroscope navigation technology with a global positioning system satellite signal receiver. Production options for up to 784 systems to be delivered over the next five years could bring the total contract value to more than \$50 million.

The Navy and the Air Force exercised a \$31.1 million Lot III option for six production Beech/Pilatus PC-9 MkII aircraft for the Joint Primary Aircraft Training System program, bringing the total number ordered to date up to 10. The Lot III planes will begin delivery in 1999.

NAS Patuxent River, Md., served as the staging area for Air Force, Air National Guard and Reserve KC-135 airborne refueling tankers during Joint Task Force Exercise 97-1 in October 1996. On 24-hour alert to refuel Navy F-14s, F-18s and EA-6s and Air Force B-1Bs, E-3s and F-15s, these tankers presented a unique sight at the naval air station.



Roger LeJeune

Established

VAQ-137 Rooks



A 3 October 1996 ceremony at NAS Whidbey Island, Wash., marked the establishment (officially 1 October) of Tactical Electronic Warfare Squadron (VAQ) 137. Cdr. Ronald C. Plucker is the first CO of the *Rooks*.

Carrying on the traditions of an earlier VAQ-137, which was disestablished on 30 September 1994, VAQ-137 is the third of five planned EA-6B *Prowler* squadrons to be formed as joint Navy and Air Force squadrons to replace the Air Force EF-111A electronic warfare aircraft as part of expeditionary forces. VAQ-137 is deploying with Carrier Air Wing 1 on board *George Washington* (CVN 73) before its Air Force contingent arrives. (See "Joint EA-6B Program Under Way.")

Disestablished

CVW-15 Wolfpack

A 16 February 1995 ceremony at NAS Miramar, Calif., marked the disestablishment (officially 31 March) of Commander Carrier Air Wing (CVW) 15 after more than 51 years of service. Capt. Stanford Hlavka was the last commander of the *Wolfpack*.

Established at NAS Moffett Field, Calif., on 5 April 1951 as Commander Carrier Air Group (CVG) 15, the group was one of two active duty CVGs formed during the Korean War with reserve squadrons filling out its ranks. CVG-15 made two combat deployments to Korea, one each on board *Antietam* (CV 36) and *Princeton* (CV 37). Until the

Vietnam War was under way in earnest, CVG-15 made seven deployments to the western Pacific—on board *Yorktown* (CVA 10), *Wasp* (CVA 18), *Hancock* (CVA 19) and *Coral Sea* (CVA 43)—supporting U.S. policy during the Nationalist Chinese evacuation of Tachen Island (1954), the Quemoy-Matsu Crisis (1958) and the Laotian Crisis (1959–1961).

Redesignated CVW-15 in 1963, the *Wolfpack* was aboard *Coral Sea* in February 1965 when President Lyndon Johnson ordered the Flaming Dart raids on North Vietnam in retaliation for Viet Cong terrorism in South Vietnam. In those raids and in the Rolling Thunder campaign that followed, CVW-15 participated fully in the air strikes against Communist forces in Vietnam and Laos. Following the 11-month deployment, CVW-15 rode *Constellation* (CVA 64) to the war zone in 1966, returning to *Coral Sea* in 1967 for four more Vietnam War cruises, the last of which included the mining of Haiphong Harbor and the Linebacker I aerial campaign. CVW-15 squadrons flew over 60,000 combat sorties during the war and downed 7 North Vietnamese MiG-17 fighters. The cost was heavy; the wing lost 65 aircraft and 56 flyers to enemy action during seven years of intense operations.

CVW-15 made three more western Pacific deployments on board *Coral Sea*, including one in support of the April 1975 evacuation of Vietnam and the May 1975 recovery of SS *Mayaguez* after its seizure by Khmer Rouge forces in the Gulf of Thailand. CVW-15 aircraft struck at Khmer airfields and supported the rescue operation. The wing made two deployments to the Indian Ocean in 1979 and 1981 on board *Kitty Hawk* (CV 63), the first during the Soviet invasion of Afghanistan and the hostage crisis in Iran.

In 1982, CVW-15 began an eight-year, six-deployment partnership with *Carl Vinson* (CVN 70). Their

first cruise together included support of the Marine peacekeeping force in Lebanon before proceeding to the Indian Ocean and western Pacific. Three deployments included operations in the northern Pacific and the Bering Sea. The 1988 tour in the Indian Ocean involved support for the Earnest Will operation, which escorted oil tankers through the Persian Gulf during the Iran-Iraq War.

CVW-15 returned to *Kitty Hawk* in 1991, cruising around Cape Horn with the ship and back to California. The wing's last two deployments were made on board *Kitty Hawk*, the first supporting the Restore Hope operation in Somalia in 1993. When Iraqi aircraft violated the no-fly restrictions of Operation Southern Watch, CVW-15 dispatched two squadrons to Dharan, Saudi Arabia, in support of the operation; the remainder of the wing arrived with *Kitty Hawk* in time to launch a strike against Iraqi targets on 13 January 1993.

During CVW-15's last deployment, the wing played a role in defusing diplomatic tensions with North Korea. Returning for the last time in December 1994, the wing's squadrons drew down rapidly as part of the post-cold war reduction of carrier air wings.



VF-51 Screaming Eagles

A 16 February 1995 ceremony at NAS Miramar, Calif., marked the disestablishment (officially 31 March) of Fighter Squadron (VF) 51 after more than 52 years of service. Cdr. John Sill was the last CO of the *Screaming Eagles*.

Established on 15 February 1943 as VF-1, the squadron began an association with Carrier Air Group (CVG) 5 that would endure for 27 years. After working up on board *Yorktown* (CV 10) with F6F-3 *Hellcat* fighters, VF-1 was redesignated VF-5 on 15 July 1943. Entering combat in August 1943, VF-5 participated in strikes against Marcus and Wake islands and sup-

ported the invasion of Tarawa. During the first half of 1944, VF-5 supported the invasion of the Marshall Islands and participated in the raids on Truk, the Marianas, Palau and Hollandia. During 10 months of operations, VF-5 downed over 90 Japanese aircraft. The squadron returned to the United States in May 1944 for transition to the F4U-1D *Corsair*.

Returning to combat in March 1945 on board *Franklin* (CV 13), VF-5's tour was cut short when the carrier was severely damaged by Japanese bombs and forced out of the war. After the war, the squadron was equipped with the F6F-5, operating from *Lexington* (CV 16) off Hawaii in 1946. On 15 November, VF-5 was redesignated VF-5A. After transition to the F8F-1 *Bearcat*, VF-5A deployed to the western Pacific in 1947 on board *Shangri-La* (CV 38).

On 16 August 1948, VF-5A was redesignated VF-51. The squadron entered the jet age on 18 November 1948 at NAS North Island, Calif., as the first squadron to operate the FJ-1 *Fury*, one of the Navy's first jet fighters. Upgrading to the F9F-2 *Panther*, VF-51 became the first Navy squadron to operate jets in combat, flying from *Valley Forge* (CV 45) against targets in Korea in July 1950. On 3 July 1950, two squadron pilots, Lt. L. H. Plog and Ens. E. W. Brown, shot down two North Korean Yak-9 fighters, scoring the Navy's first aerial victories of the war and the Navy's first victories with jet aircraft. VF-51 made two more combat deployments to the war zone, on board *Essex* (CV 9) with F9F-2Bs, and again on board *Valley Forge* with F9F-5s.

Over the next decade, VF-51 made five deployments, each with a different aircraft type: the F9F-6 *Cougar* on board *Philippine Sea* (CV 47); FJ-3 *Fury* aboard *Bon Homme Richard* (CVA 31); and the

F4D-1 *Skyray* and later F8U-1 and F-8E *Crusader* on *Ticonderoga* (CVA 14). (The squadron briefly operated F11F-1 *Tigers* in 1958.)

The squadron would return to combat in 1964, flying secret missions over Laos from *Ticonderoga* beginning in June 1964. VF-51's F-8Es launched in support of U.S. destroyers in August 1964 during the Tonkin Gulf incident. The squadron CO, Cdr. James B. Stockdale, led the Pierce Arrow retaliatory strike against North Vietnamese naval



The VF-51 *Screaming Eagles* flew from *Carl Vinson* for eight years.

bases on 5 August.

VF-51 deployed six more times to the Vietnam war zone with: F-8Es on board *Ticonderoga* and *Hancock* (CVA 19); F-8Hs once and F-8Js twice aboard *Bon Homme Richard*; and F-4B *Phantom IIs* on board *Coral Sea* (CVA 43) as part of Carrier Air Wing (CVW) 15. The squadron lost only one F-8E, one F-4B and three flyers to enemy action during the entire war, and succeeded in downing two MiG-21s with F-8Hs in 1968 and four MiG-17s with F-4Bs in May and June 1972.

The *Screaming Eagles* returned to the western Pacific twice more with *Phantoms* on board *Coral Sea*, the second time with F-4Ns flying in support of the evacuation of South

Vietnam in April 1975 and against Khmer targets in Cambodia in May 1975 in the successful effort to free SS *Mayaguez*. In 1976, the squadron made its last *Phantom* deployment, this time with CVW-19 on board *Franklin D. Roosevelt* (CV 42) in the Mediterranean Sea.

In late 1977, VF-51 retired its F-4Ns and acquired the F-14A *Tomcat*, rejoining CVW-15 for the squadron's 18 remaining years. It made two deployments to the Indian Ocean in 1979 and 1981 aboard

Kitty Hawk (CV 63), the first during the Soviet invasion of Afghanistan and the hostage crisis in Iran.

In 1982, VF-51 joined *Carl Vinson* (CVN 70) for eight years and six deployments. Their first deployment together included support of the Marine peace-keeping force in Lebanon before proceeding to the Indian Ocean and the western Pacific. Three deployments included operations in the northern Pacific and the Bering Sea. In 1984, VF-51 became the first F-14 squadron to intercept Soviet TU-22M *Backfire* strike aircraft. The 1988 deployment to the Indian Ocean involved support for Operation Earnest Will, the

escort of oil tankers through the Persian Gulf during the Iran-Iraq War.

VF-51 returned to *Kitty Hawk* in 1991, cruising around Cape Horn and returning to California. The squadron's last two deployments were made on board *Kitty Hawk*, the first in support of Operation Restore Hope in Somalia in 1993. When Iraqi aircraft violated the no-fly restrictions of Operation Southern Watch, VF-51 dispatched support aircraft to Dharan, Saudi Arabia; the remainder of the squadron arrived with *Kitty Hawk* and participated in a strike against Iraqi targets on 13 January 1993. During VF-51's last deployment, the squadron operated off Korea during the diplomatic tensions in the region with North

Korea. Returning for the last time in December 1994, VF-51 prepared for disestablishment as part of the post-cold war reduction of squadrons.

VF-111 Sundowners

A 16 February 1995 ceremony at NAS Miramar, Calif., marked the disestablishment (officially 31 March) of Fighter Squadron (VF) 111 after almost 40 years of service. Cdr. Tom Joyce was the last CO of the *Sundowners*.

Established on 4 June 1956 as Attack Squadron (VA) 156, the squadron was known as the *Iron Angels* and flew the F11F-1 *Tiger*. VA-156 made one deployment to the western Pacific with Carrier Air Group 11 on board *Shangri-La* (CVA 38) during the 1958 Quemoy-Matsu crisis.

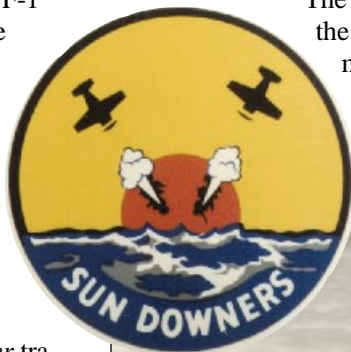
On 20 January 1959, VA-156 was redesignated VF-111, assuming the *Sundowner* traditions of a VF-111 that was disestablished the same day. VF-111 made two deployments to the western Pacific during the Laotian crises of the early 1960s, once on board *Shangri-La* and once aboard *Hancock* (CVA 19). After transition to the F8U-2N (F-8D) *Crusader*, VF-111 deployed twice again to the western Pacific on board *Kitty Hawk* (CVA 63). During the second deployment the squadron flew in Yankee Team operations over Laos.

The *Sundowners'* next six deployments, from 1965 through 1972, took the squadron into intensive combat operations over Vietnam, the first two with F-8Ds on board *Midway* (CVA 41) with CVW-2, followed by F-8Es aboard *Oriskany* (CVA 34) with CVW-16. VF-111 deployed again in 1967 on *Oriskany* with F-8Cs, sending a detachment to provide fighter protection for CVW-10 on board *Intrepid* (CVS 11). The *Intrepid* detachment was repeated in 1968 with F-8Hs. Shortly before its return in February 1969, the main

body deployed again on *Ticonderoga* (CVA 14) with CVW-16. The squadron's last F-8H deployment occurred in 1970 on board *Shangri-La* with CVW-8. In 1971, VF-111 made the transition to the F-4B *Phantom II* and made its last Vietnam War deployment aboard *Coral Sea* (CV 43) with CVW-15.

During the Vietnam War, the *Sundowners* shot down two North Vietnamese fighters—a MiG-21 in 1968 with an F-8C and a MiG-17 in 1972 with an F-4B. Through the long war, VF-111 lost 11 F-8s, 1 F-4 and 8 flyers to enemy action.

The *Sundowners* returned to the western Pacific twice more with *Phantoms* on board *Coral Sea*, the second time with F-4Ns flying in support



The VF-111 *Sundowners* saw extensive service in the Vietnam War, transitioning from the F-8 *Crusader* to the F-4B *Phantom II* in 1971.

of the evacuation of South Vietnam in April 1975 and against Khmer targets in Cambodia in May 1975 in freeing SS *Mayaguez*. In 1976, the squadron made its last *Phantom* deployment, this time with CVW-19 aboard *Franklin D. Roosevelt* (CV 42) in the Mediterranean Sea.

In late 1977, VF-111 retired its F-4Ns and acquired the F-14A *Tomcat*, rejoining CVW-15 for the squadron's 18 remaining years. The unit also assumed the air wing's photoreconnaissance role with its Tactical Air Reconnaissance Pod System-equipped F-14As. The squadron made two deployments to the Indian Ocean in 1979 and 1981 on board *Kitty Hawk* (CV 63), the first during the

Soviet invasion of Afghanistan and the Iranian hostage crisis.

In 1982, VF-111 joined *Carl Vinson* (CVN 70) for eight years and six deployments. Their first cruise together included support of the Marine peacekeeping force in Lebanon before proceeding to the Indian Ocean and western Pacific. Three deployments included operations in the northern Pacific and the Bering Sea. The 1988 Indian Ocean deployment involved support of Operation Earnest Will, the escort of oil tankers through the Persian Gulf during the Iran-Iraq War.

VF-111 returned to *Kitty Hawk* in 1991 for a cruise around Cape Horn before returning to California. The squadron's last two deployments were made aboard *Kitty Hawk*, the first in support of Operation Restore Hope in

Somalia in 1993. When Iraqi aircraft violated the no-fly restrictions of Operation Southern Watch, VF-111 dispatched support aircraft to Dharan, Saudi Arabia; the rest of the squadron arrived with *Kitty Hawk*, participating in a strike against Iraqi targets on 13 January 1993. During VF-111's last deployment, the squadron operated off Korea during the diplomatic tensions in the region with North Korea. Returning for the last time in December 1994, VF-111 prepared for disestablishment as part of the post-cold war reduction of squadrons.

Rick Burgess contributed the establishment/disestablishment articles.