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Covers – Front: PH1 Mark Therien took this photo of a ground crewman cleaning the canopy of a VF-302 F-14. Back: Joan Frasher captured the bridge of *Lexington* (AVT 16).

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

Downsizing

Times are tight. The budget reduction from the early 80's to the present will be in the neighborhood of $35 billion for the Department of the Navy. The pain is obvious, in squadrons, ships, submarines and associated infrastructure reductions, but the future of Naval Aviation is bright. Twelve carriers and the air wings to go on these carriers remain intact. Likewise, the capabilities spelled out in "...From the Sea" – C4I, Battle Space Dominance and Power Projection – bode well for Naval Aviation programs and war fighting. In those three of four tenants in "...From the Sea" (the fourth is sustainment), Naval Aviation plays the major role. The Secretary of Defense through the "Bottom up Review" has favorably endorsed the Navy's "...From the Sea" doctrine and supported the use of Navy and Marine Corps forces for power projection around the world. This has a decisive and positive impact on Naval Aviation.

The worst impact of the downsizing occurs in 1994. After that, programs and plans will settle out. A smaller Navy in the future, but with the same opportunities to fly, steam, fight and win there have always been, including postgraduate education, Test Pilot School, PEP programs and other challenging billets which aviators have been enjoying for years. The challenges for aviators will continue with missions becoming increasingly complex. Command opportunities will be consistent with the size of the force. In those communities rapidly downsizing, the best people will be moved into other communities to provide equal command opportunity for the best of the best. The recent Command and Department Head screen boards confirm this commitment.

History repeats itself; the military has downsized before only to expand its capability to meet the emerging threat. I cannot predict what this world might be like in 10 or 15 years, but I do know the importance of the Navy and Naval Aviation to our nation's future. Naval Aviation most assuredly has a bright future. I wish I could be an Ensign again! Keep'em flying--safely!

JO1(SW) Eric Sesit

RAdm. R. D. Mixson

Ted Carlson

A VMFA(AW)-121 FA-18D returns to MCAS El Toro upon completion of a local training mission.

Osborn

Tomcat Tangle

A pair of F-14s launched from USS *Carrier* were on a one-versus-one air combat maneuvering training flight. In the working area, the *Tomcats* split up and began an intercept from 18 miles at 24,000 feet, intending to pass one another right to right.

The leader commenced a hard-left, nose-low turn. The wingman turned right, nose high, toward the leader, in the same "circle of flight." The aircraft lost momentary sight of each other, then the wingman regained the leader at approximately two miles. The wingman appeared to be nearly nose-on to the leader – the wingman's nose "leading" the approaching *Tomcat* – and transmitted, "Going to heat," signifying he was selecting Sidewinder. The aircraft were oblique to each other in the circle, the wingman somewhat inside the leader's turn.

The leader "appeared" at the top of the wingman's heads-up display (HUD) but the wingman did not get a Sidewinder tone. The wingman called "Fox One" at 1.2 miles and then selected gun. He believed the *Tomcats* would pass right to right with his F-14 having a 20-degree "advantage."

Noting the two aircraft seemed to be at the same altitude, the wingman pulled 2.5 Gs to achieve vertical separation. At this point, the leader was vertically centered and slightly to the right in the wingman's HUD, the F-14s now very close to each other.

The wingman pulled his nose up, intending to pass over the leader in a hard right turn, and called, "Coming right." At this instant, the lead *Tomcat* appeared at the bottom of the wingman's HUD.

The leader recognized that a collision was imminent and pushed his stick full forward and to the left. But the fighters collided nonetheless.

Nine feet of the leader's right wing was severed and 80 percent of the inboard flap was destroyed. The aircraft yawed left and became uncontrollable. The pilot saw a fireball aft and left of the *Tomcat* as it went into a flat spin, engulfed in flames, with part of the tail missing. The radar intercept officer

(RIO) observed a fireball moving forward inside the cockpit. The pilot was thrown forward as he tried to actuate the lower ejection handle with his right hand. Seconds after the collision, the RIO reached for the upper ejection handle and felt heat behind the seat. Then, seeing flames between his legs, he initiated ejection for both crew members with the lower handle.

Although both the pilot and RIO lost their helmets and oxygen masks in the process, the ejection was successful. They parachuted into the sea and were recovered, the pilot by a fishing boat and the RIO by the carrier's helicopter.

After impact, the second *Tomcat* plunged into a series of uncontrolled, accelerating, nose-low rolls to the right, the turn needle pegged to the right. The wingman went to military power and put in full left rudder. At 12,000 feet with airspeed going over 320 knots, the RIO declared, "I'm ejecting!" Because he felt he was regaining control, the pilot said, "Don't eject, don't eject!"

Shortly thereafter, control was regained and the pilot leveled the F-14 at 10,000 feet. The wingman proceeded to a shore-based divert field, landing safely.

Grampaw Pettibone says:

Great smokin' holes! Gents, this fries my liver! Seems we're readin' about this sorta thing too durn often.

Three of the four aircrewmen involved were well-trained flyers. Even so, spacial awareness went by the boards as the two birds took aim at each other. Both pilots busted the rules by failing to positively establish direction of the pass. Plus, both executed forward-quarter missile attacks inside of 9,000 feet and within 20 degrees of the target's nose – a no-no. They misjudged distance and then waited too long to act.

It's as simple and as complicated as that. "Trainin' like we fight" sounds good, but we still gotta be here to fight. Bustin' up good aircraft and losin' experienced aviators in the process ain't accomplishin' any mission in Naval Aviation I ever heard of. You men and women out there puttin' high-performance aircraft through their paces – and Gramps doesn't know any birds in the USN/USMC inventory, fixed or rotary wing, which aren't high-performance flyin' machines – might take note of professional football cornerbacks. The great ones know their lines of pursuit. They know where they are at all times, which receivers are comin' at 'em – and from where – and when to make their move to bust up the pass, without gettin' hurt. We gotta get these simple things back under control. The rules are there for

a reason – some are even written in blood – now let's re-cage our gyros and pay attention! Nuff said.

Prowler Predicament

As a Block 82 EA-6B *Prowler* was fired along the catapult on a night launch, one of the "backseaters" saw a bright flash in the vicinity of the aft circuit breaker panel. Once safely airborne, the crew determined that the flash was caused by a nonessential circuit breaker popping. Coincident with this, the INS (inertial navigation system) circuit breaker in the forward cockpit popped, causing loss of the *Prowler*'s navigational computer. Five minutes later, a third circuit breaker popped.

One of the flyers remembered a NATOPS (Naval Air Training and Operating Procedures Standardization) caution: "When a popped circuit breaker is reset in the EA-6B, a high-temperature flash fire can result." So, although the nav computer was inoperative, the crew decided not to reset the circuit breaker and to continue the mission relying on their TACAN (Tactical Air Navigation system).

Two minutes later, a backseater noticed that his UHF (ultra high frequency) repeaters were now blank and asked the front crewmen, "Is there a reason you've turned off the radios?" The answer was, "The radios have not been turned off." Stay awake; now it gets interesting.

The UHF radio circuit breakers were in, but the radios were inoperative. The right front seater tried VHF (very high frequency) guard but got no reply from USS *Carrier*. He did make contact with a foreign ground controller on VHF, but the controller couldn't communicate on UHF and, therefore, was unable to advise the ship of the EA-6B's predicament. The *Prowler* had an HF (high frequency) radio, but it tunes only in whole numbers while the frequencies that the ship monitors all use the tenths digit.

Summarizing, the *Prowler* had two radios which would not work and two radios which worked perfectly but could not be used. Conclusion: the EA-6B was NORDO (no radio).

The crew thus resorted to their PRC-90 emergency radios, discovering, however, that they had much shorter range than anticipated. At 20 miles from the ship, they were unable to establish contact. Their communications receiver was also inoperative, but the scanner functioned properly. The approach control frequency was selected and, with relief, the crew heard a controller issuing marshall instructions. Shortly thereafter, they switched to the tanker frequency and rendezvoused on it. The *Prowler* resorted to PRC-90s for communication with the tanker, which the tanker described as "weak but readable." Eventually, the EA-6B returned to approach control and was ushered down to an uneventful recovery utilizing the scanner.

Grampaw Pettibone says:

There are 10, count 'em, 10 radios in a *Prowler*: 2 UHFs, 1 VHF, 1 HF, a scanner, a comm receiver, and a PRC-90 for each of the four aviators in the cockpits. As one of the participants in this flight noted when discussing lost radio procedures during the briefing, he believed that with so many radios on board, "it [loss of radios] could never happen to us."

But it darn near did, at night no less. And Gramps has yet to meet the Naval Aviator who looks forward to a night NORDO approach to any deck.

The *Prowler* crew played the situation well, but they mighta got with that scanner a bit quicker. Both strike control and an E-2 *Hawkeye* had been trying to reach the EA-6B on UHF guard but that frequency wasn't dialed in.

Those PRC-90s, by the way, are nice to have around, even if their range is limited.

A tip of the leather helmet to Ltjg. Tony Silk.

Corps Holds Standdown

General Carl E. Mundy, Commandant of the Marine Corps, directed a 48-hour standdown of all Marine Corps flight operations. The order followed a crash of an AV-8B *Harrier* at Camp Lejeune, N.C., 22 September. Additionally, four separate mishaps since 17 August involving six Marine Corps helicopters took the lives of nine marines, one sailor, one Army officer and one civilian.

The standdown, held 27 and 28 September, affected the entire fleet of both active duty and reserve Marine Corps fixed-wing and rotary-wing aircraft. The standdown allowed commanders the opportunity to assess current operational procedures and discuss safety-related issues.

The Commandant pointed out that although the mishaps have occurred for a variety of reasons and no one factor stands out as primary, at a minimum, commanders should look at training standards, personal qualifications, maintenance practices and flight leadership training and certification.

In a short message to Marine commanders, Mundy said, "I retain full confidence in the Marines maintaining and flying our aircraft, but it is time to stop and reflect on our current methods of conducting business."

Roosevelt Comes Home, America Sails to the Med

A joint task group comprising units of *America* (CV 66) carrier battle group and *Guadalcanal* (LPH 7) amphibious ready group relieved *Roosevelt* (CVN 71) in the Mediterranean. *Roosevelt* completed its six-month cruise with a Special Marine Air Ground Task Force (SPMAGTF) comprised of 600 Marines, six CH-53D *Sea Stallions* and four UH-1N *Hueys* (see *NANews*, March-April 1993, p. 12).

America, with Carrier Air Wing 1 embarked, will carry only 220 Marines of the 22nd Marine Expeditionary Unit. The other 1,500 Marines will deploy aboard the task group's amphibious ships, enabling the amphibs to break away from the force for independent missions and training.

Mishaps Claim Three Lives

Three crewmen were killed and one was injured after a crash of a CH-46 *Sea Knight* helicopter from *White Plains* (AFS 4) on 24 August. The helicopter crashed near the town of Siji in the emirate of Fujairah while it was returning to ship after a routine logistics mission.

Lieutenant Jeffery R. Roberto, Aviation Electrician's Mate Second Class Matthew R. Wicks and Aviation Electrician's Mate Third Class Sean M. Saye were killed in the mishap. Lieutenant (jg) Bruce E. Winters survived but was injured.

In other mishaps, two members of VF-103 based at NAS Oceana were listed in good to stable condition after they ejected from their F-14B *Tomcat* which went down about 40 miles northeast of Cape Hatteras, 13 September. The two aviators were rescued almost immediately after entering the water by the operators of two private fishing boats.

Also, two, A-6 *Intruders* flying from *Abraham Lincoln* (CVN 72), crashed in the Persian Gulf. The four crew members were rescued and in good condition.

LAMPS Contract Awarded

The Navy has awarded IBM Federal Systems Company of Owego, N.Y., the Light Airborne Multi-Purpose System (LAMPS) MK III Block II Engineering and Manufacturing Development contract. The contract is valued at $242 million.

The upgrade will be a major technology and performance enhancement that will improve the mission processor, radar, electronic support measures and controls and displays. The LAMPS MK III has flown more than 400,000 hours while exceeding all its reliability and availability goals.

The Upgrade consists of sensor improvements in radar, including the addition of Inverse Synthetic Aperture Radar (ISAR) imaging, and the integration of the Airborne Low Frequency Sonar (ALFS) subsystem. The mission computer and operator controls and displays will be upgraded as well as provisions for Tactical Data Transfer (TDT) capability to provide the transfer of contact data from one aircraft to another to support cooperative multi-platform missions.

Last HH-1N Helo Retires

After 15 years of naval service, the HH-1N "Huey" helicopter stationed onboard *Nassau* (LHA-4) has retired. With service aboard three Atlantic Fleet ships, the helicopter affectionately dubbed "Penthouse 827" was the last of the HH-1N class of helicopters stationed aboard a Navy amphibious ship.

Penthouse 827 flew from the flight decks of *Guadalcanal* (LPH 7) and *Iwo Jima* (LPH 2) before serving aboard *Nassau*. The helo logged more than 7,700 career flight hours.

The helicopter will be stored at Davis-Monthan Air Force Base in Tucson, Ariz.

Navy Recruiting Command Bids T-34B Goodbye

An era in Navy Recruiting Command (NRC) history came to a close on 29 September with the transfer of T-34B BuNo. 140938 to the Marine Corps Flying Club at MCAS, El Toro, Calif.

Affectionately known by countless Navy Aviators as the "Teenie-Weenie," the T-34B *Mentor* was used by NRC to screen potential officer applicants and to generate Navy awareness. Since the aircraft's introduction in November 1972, innumerable future officers, enlisted personnel and local community leaders had the opportunity to go aloft in the Navy flight training aircraft.

NRC received its T-34Bs from the Chief of Naval Air Training who had declared

PHC Bishop

The last T-34B BuNo. 140938 retired to the El Toro Marine Corps Flying Club. Pictured with the last Mentor are LCdr. Randy Rothchild, T-34 Quality Assurance Team (QAT), Ms. Pat Fileicchia, manager, El Toro Marine Corps Flying club and Cdr. Bob Salley, OIC, T-34 QAT.

them excess to operational requirements after they served as primary training aircraft for fledgling Naval Aviators. With the end of the aircraft's useful service life quickly approaching, a suitable replacement for the T-34B was sought. The T-34C *Turbo Mentor*, also referred to as the *Turbo-Weenie* or *Whisper Weenie*, was considered for acquisition and would have provided a significant improvement in performance, speed and capability, but would also have a significant increase in operating costs. Ultimately, lack of an affordable replacement aircraft and decreasing budgets led to the decision to cancel the NRC Flying Program.

VX-4, 5 to Become VX-9

Effective 29 April 1994, VX-4, NAWS Point Mugu, and VX-5, NAWS China Lake, Calif., will disestablish. On 30 April 1994, the assets of both squadrons will form VX-9 at China Lake.

In preparation for the consolidation, two additional FA-18 aircraft transferred from the Point Mugu squadron to VX-5 this past September. The maintenance efforts for the *Vampires* will be augmented by the transfer of personnel from VX-4.

Disestablished ...

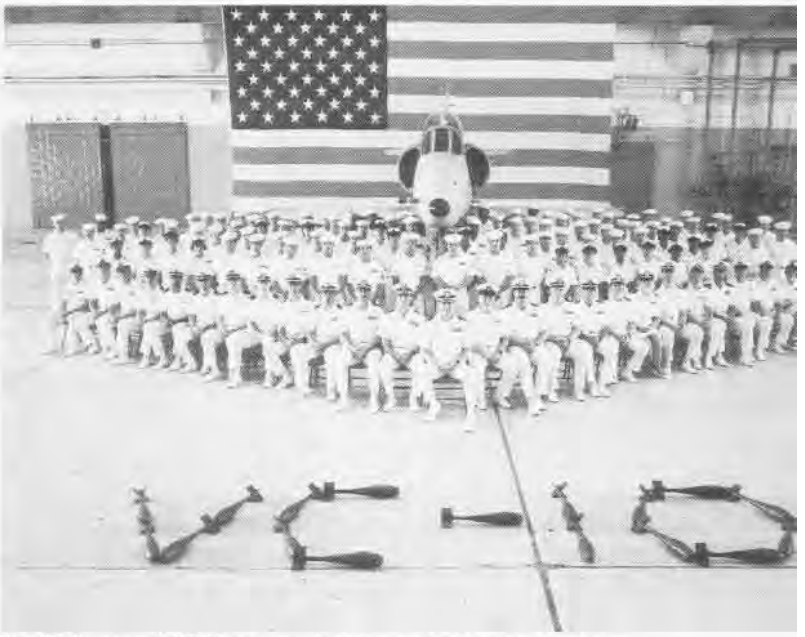
VC-10 Challengers

A 6 August ceremony at NAS Guantanamo Bay, Cuba, marked the disestablishment (officially 14 August 1993) of Fleet Composite Squadron (VC) 10 after almost 50 years of service. Cdr. Keith C. Naumann was the last commanding officer of the *Challengers*.

Established at San Juan, P.R., on 1 December 1943 as Utility Squadron (VJ) 16, the squadron assumed the missions of providing gunnery target towing and radar tracking services to fleet units, search and rescue, and photography in the Caribbean area, missions that it essentially retained for its entire existence. VJ-16 was initially equipped with PBY-5/5A, TBF-1, SBD-5, J2F-5/6 and SNJ-4 aircraft. In April 1944, the squadron moved briefly to NAAF Roosevelt Roads, P.R., before moving to CGAS Miami, Fla., in May 1944.

At Miami, VJ-16 also acquired JM-1/2 and eventually FM-2, F6F-5, and TBM-1J/3J aircraft and established 10 detachments in Florida, Texas, Louisiana, Cuba, Panama, Trinidad and Brazil. In April 1945, with hostilities ending, the squadron consolidated its operations at NAS McCalla Field, Guantanamo Bay, Cuba. On 15 November 1946, VJ-16 was redesignated VU-10.

Over the next decade, VU-10 operated a wide variety of additional aircraft (F6F-5D, F7F-2D, F8F-2, JD-1, UF-1, R4D-5, PBM-5A, PBY-6A, SNB-5) as well as target drones (F6F-5K and TD2C). The squadron entered the jet age during the mid-1950s with the addition of the F9F-6/8 *Cougar*, greatly improving the quality of training available to fleet units. The *Cougars* were replaced by FJ-3 *Furies* in 1958. Starting in 1957, VU-10 maintained a detachment at NAS Jacksonville, Fla., which became part of VU-4 in 1963. In 1959, the squadron retired the Atlantic Fleet's last F6F *Hellcats*, and replaced them with KD2R5



The Challengers of VC-10 pose one last time with a TA-4J Skyhawk. The squadron disestablished 6 August.

The Coast Guard has withdrawn its sole EC-130V Hercules (serial 1721) from service due to budgetary pressures. The former HC-130H was modified by General Dynamics with a rotodome-mounted APS-145 early-warning radar in 1991 and evaluated in several roles for the past 18 months, including fisheries patrols from Alaska and Cape Cod, and search and rescue and drug interdiction missions off Florida and in the Caribbean. The one-of-a-kind aircraft, based at CGAS Clearwater, Fla., also provided range support for the space shuttle program. The EC-130V may be transferred to a component of the Department of Defense.

Thanks to David Reade for information.

Terry Taylor via P-3 Publications

drones, which were used until 1965.

In January 1960, VU-10 moved to NAS Leeward Point at Guantanamo, and soon thereafter supplemented its fleet support mission with that of the defense of Guantanamo Bay from now-hostile Cuban forces. The squadron's combat capability was enhanced with the 1961-62 transition from the FJ-3 to the F8U-1 (F-8A) *Crusader*. During the October 1962 Cuban Missile Crisis, VU-10 became the primary air defense force for Guantanamo Bay, keeping its F-8s on continuous combat air patrol.

In 1963, US-2C and F-8B aircraft replaced the UB-26J (JD-1) and F-8A, respectively, in VU-10. In 1964, the F-8D replaced the F-8B. On 1 July 1965, VU-10 was redesignated Fleet Composite Squadron (VC) 10. In 1967, the F-8Ds were replaced by old F-8As, which in turn were superseded by F-8Cs in 1968, followed in 1969 by F-8Ks, which were remanufactured and modernized F-8Cs. VC-10 maintained its combat readiness throughout the frequent aircraft transitions.

In 1976, VC-10's F-8s were replaced by TA-4J *Skyhawks*, modified to carry a wide range of conventional ordnance and AIM-9 *Sidewinder* air-to-air missiles. (During the late 1980s, the squadron also operated a single EA-4F *Skyhawk*.) To maintain a high state of readiness, the *Challengers* routinely honed their attack skills on a target range three miles north of their base.

Over the years, VC-10 worked closely with Fleet Training Group to sharpen the skills of Atlantic Fleet, Coast Guard and foreign units by launching multiplane raids, missile simulations, target towing, and dissimilar air combat training. The *Challengers* routinely operated detachments from Roosevelt Roads, and NAS Cecil Field and NAS Key West, Fla. to train battle groups preparing for deployments.

With the end of the Cold War lessening the need for forces to defend Guantanamo Bay, and with further defense budget reductions, VC-10 was selected for disestablishment. With VC-10's demise, only two VC squadrons, VC-6 at NAS Norfolk, Va., and VC-8 at Roosevelt Roads, P.R., remain active.

Three F-14As of VF-1 on a routine training mission. VF-1 disestablished 1 July.

VF-1 Wolfpack

A 1 July ceremony at NAS Miramar, Calif., marked the disestablishment (officially 1 October 1993) of Fighter Squadron (VF) 1 after almost 21 years of service. Cdr. Donnie L. Cochran was the last commanding officer of the *Wolfpack*, the fourth squadron in Naval Aviation history to bear the designation VF-1.

Established at NAS Miramar on 14 October 1972, along with sister squadron VF-2 as the fleet's first operational F-14A *Tomcat* squadrons, VF-1 joined Carrier Air Wing (CVW) 14 on 1 July 1973. By March 1974, the *Wolfpack* was fully operational, deploying onboard *Enterprise* (CVN 65) in September 1974 for the Western Pacific, the first operational deployment of the *Tomcat*. After operations in the Indian Ocean, *Enterprise* assisted Operation Frequent Wind, the evacuation of 1373 Americans and 6,400 Vietnamese from South Vietnam as it was conquered by North Vietnam. On 29 and 30 April 1975, VF-1 flew sorties to cover the evacuation, firing its cannons against ground targets, according to one source.

Over the next three years, VF-1 made two more deployments to the Western Pacific and Indian Ocean onboard *Enterprise*, switching to CVW-2 onboard *Ranger*(CV 61). In 1980, the *Wolfpack* spent 130 days in the Indian Ocean in response to the hostage crisis in Iran. After one more deployment onboard *Ranger*, VF-1 sailed with *Kitty Hawk* (CV 63) in January 1984 for seven months. After upgrading to Block 135 versions of the F-14A, VF-1 returned to *Ranger*, deploying again in July 1987 and participating in Operation Earnest Will, protecting Kuwaiti oil tankers in the Persian Gulf.

The *Wolfpack* went on to make three more deployments with *Ranger* and CVW-2. The second of these was an emergency deployment in December 1990 in support of Operations Desert Shield and Desert Storm. VF-1 flew over 540 combat sorties from the Persian Gulf, and became the only F-14 squadron to shoot down an enemy aircraft during the conflict, destroying an Iraqi Mi-8 helicopter on 6 February 1991, with an AIM-9 *Sidewinder* missile.

The *Wolfpack*'s final deployment took the squadron back to the Persian Gulf, flying patrols in late 1992 over southern Iraq in support of Operation Southern Watch, preventing Iraqi aircraft from striking Shia rebels in southern Iraq. In December 1993, VF-1 provided air support for U.S. ground troops providing relief to starving people in war-torn Somalia. The *Wolfpack* returned to NAS Miramar for the last time in January 1993.

VF-1's transition to the F-14D in April 1993 was canceled when its planned disestablishment was announced. VF-2 is now the

sole F-14D squadron assigned to CVW-2.

VF-33 Starfighters

A 24 September ceremony at NAS Oceana, Va., marked the disestablishment (officially 1 October 1993) of Fighter Squadron (VF) 33 after almost 45 years of service. Cdr. S.C. Schlientz was the last commanding officer of the *Starfighters*.

Established at NAS Quonset Point, R.I., on 12 October 1948, VF-33 was the second squadron in Naval Aviation history to bear that designation. Equipped with the F8F-1B *Bearcat* fighter, the *Tarsiers*, as the squadron was named, made short cruises in the Atlantic and Caribbean onboard *Kearsarge* (CV 33) and *Leyte* (CV 32). The squadron transitioned to the F4U-4 *Corsair* in December 1949, deploying to the Mediterranean with Carrier Air Group (CVG) 3 onboard *Leyte* in May 1950. The deployment was cut short after four months in order to prepare for deployment to the Korean war zone.

The *Tarsiers* sailed with *Leyte* through the Panama Canal and flew their first strikes in Korea in October 1950. VF-33 flew combat air patrol, close air support, and interdiction strikes over North Korea, including cover for the evacuation of Hungnam. VF-33 departed the war zone in January 1951, earning the Navy Unit Citation for its combat tour.

Shortly after returning to Quonset Point, VF-33 moved to NAS Sanford, Fla., deploying twice to the Mediterranean onboard *Leyte*, in 1952 and 1953. In May 1953, the *Tarsiers* entered the jet age with transition to the F9F-6 at NAS Cecil Field, Fla., and joined CVG-6 onboard *Midway* (CV 41), deploying to the Mediterranean in January 1954. Upon return, VF-33 moved to NAS Oceana, Va. for transition to the FJ-3 *Fury*. The squadron returned to the Mediterranean in September 1955 with CVG-6, this time onboard *Lake Champlain* (CV 39), and again in 1956 onboard *Intrepid* (CV 11).

VF-33 commenced transition to the F11F-1 *Tiger* in November 1957, and returned to the Mediterranean with *Intrepid* in 1959 and again in 1960. Upon return in February 1961, the *Tarsiers* transitioned to the F8U-1E *Crusader*, deploying to the Mediterranean in August 1961, their last cruise with *Intrepid*. Upon return in March 1962, VF-33 received F8U-2NE (F-8E) versions of the *Crusader*, and joined *Enterprise* (CVAN 65) with CVG-6 on the nuclear-powered carrier's first deployment, in August 1963, to the Mediterranean.

One week after returning to Oceana, VF-33 reboarded *Enterprise* to participate in the quarantine of Cuba during the October 1962 Cuban Missile Crisis. VF-33 returned to the Mediterranean twice more onboard *Enterprise*, in 1963, and in 1964 in conjunction with Operation Sea Orbit, sailing around the world with an all-nuclear-powered task force.

In February 1965, VF-33 transitioned to the F-4B *Phantom II* and deployed twice to the Mediterranean over the next two years with Carrier Air Wing (CVW) 6 onboard *America* (CV 66). After transition to the F-4J version in September 1967, VF-33 made its only deployment to Southeast Asia, a round-the-world cruise with *America* from April to December 1968. The *Tarsiers* flew over 4,000 combat hours, delivering over 3 million pounds of ordnance against enemy forces in Vietnam, and winning the Navy Unit Commendation. The squadron lost three F-4Js to enemy action, but scored the first air-to-air victory for the F-4J, shooting down a North Vietnamese MiG-21C with a *Sidewinder* missile near Vinh on 10 July 1968.

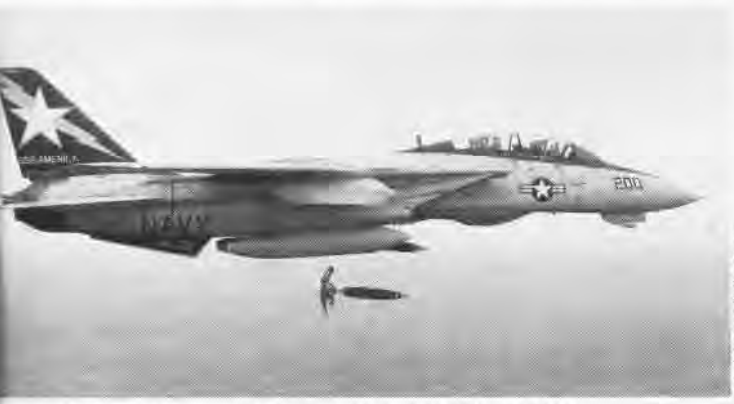
Over the next 13 years, VF-33 made six Mediterranean deployments with CVW-7 and two with CVW-6 aboard *Independence* (CV 62), including one 1981 excursion to the Indian Ocean during the hostage crisis in Iran. In June 1972, VF-33 became the first East Coast squadron to be commanded by a naval flight officer (Cdr. F. G. Staudenmayer). The *Tarsiers* operated in the eastern Mediterranean during the 1973 Arab-Israeli conflict, flying 800 sorties.

VF-33 underwent considerable change in 1981 with transition to the F-14A *Tomcat*, adopting a new nickname, the *Starfighters*, and joining CVW-1 onboard *America*. Over the next 12 years, VF-33 operated from *America* on seven major deployments to the Mediterranean, Indian Ocean, Red Sea and Persian Gulf, plus several major exercises in the North Atlantic, pioneering operations in a Norwegian fjord. The *Starfighters* also took *Theodore Roosevelt* (CVN 71) on her shakedown cruise in 1987, and rode *Constellation* (CV 64) around Cape Horn in 1990.

During the 1986 deployment, VF-33's *Tomcats* provided cover for U.S. retaliatory strikes in March against Libyan sea and land targets, and again in April during Operation Eldorado Canyon. In December 1990, the *Starfighters* deployed to the Red Sea and then to the Persian Gulf in support of Operations Desert Shield and Desert Storm, flying over 200 combat sorties in support of coalition forces against Iraqi forces, and winning the Navy Unit Commendation. VF-33 returned to the region on one final deployment in December 1991, returning in June 1992.

While preparing for a return to the Middle East, VF-33 became qualified in delivery of bombs and participated in Exercise Ocean Venture in May 1993. VF-33 was selected for disestablishment as part of accelerated force-level reductions, and made its final flight on 11 August 1993.

Disestablishment articles by LCdr. Rick Burgess.



Fred "Zippo" Dillingham

The Starfighters of VF-33 disestablished on 24 September.

Preparing an Old Friend for the End

By JO1(SW) Eric S. Sesit

From his trailer window on Pier 6 at the Philadelphia Naval Shipyard, Lieutenant Gary L. Braley has a great view of the last ship he decommissioned. Cocooned in a constantly monitored atmosphere, the battleship *Iowa* (BB 61) now serves the mothball fleet. "I've been in the Navy for 23 years. Six of the eight ships I've served on have been decommissioned," the Limited Duty Officer lamented. "*Forrestal* will be the seventh."

Braley, the inactivation officer onboard Forrestal (AVT 59), has the unenviable job of preparing the aircraft carrier for safe waterborne stowage and eventual striking from the Navy's list of active ships. It is a routine performed with increasing frequency as the Navy scales down its fleet. Five ships and two submarines faced decommissioning in September alone. And although each ship posed different challenges, the process of inactivating any ship requires planning and long hours of dirty, hard work.

The Chief of Naval Operations decides which ships to inactivate. The age of the ship, the type and most recent availability repair completed, and the overall mechanical condition of the ship help influence his decision.

Whether to strike a ship from the Navy register completely or place it in mothballs is based on the total cost to reactivate the ship in an emergency. Depending upon the ship's condition when inactivated, the cost to upgrade and modernize a ship to meet the Navy's future requirements might be excessive. *Forrestal* was halfway through its availability repair when the decision came to inactivate. Since much of the work was not completed, it would require a substantial amount of money above a normal carrier reactivation to bring the ship back into service if mothballed. Therefore, *Forrestal* will be stricken from the register. *Midway* was placed in mothballs in 1992 and *Ranger* joins her in 1994.

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Once the heart and soul of Forrestal, the flying bridge and bridge now stand deserted and sealed.

Placing a ship in mothballs means storing the ship in a condition where she can be brought back into service if required. The equipment remains on board and the entire ship is sealed so humidity and the elements can't damage the electronics. "A ship in mothballs appears as if the crew just got up and walked off one morning," Braley said. "Striking a ship means completely stripping the ship of all equipment and preparing her for safe stowage until final disposition."

"There are three processes involved in decommissioning any ship: inactivating, decrewing and the actual decommissioning ceremony," Cdr. C. W. Chesterman, Jr., *Forrestal's* chief engineer, said. "Obviously, the people were our main priority. We had to arrange for transfer orders for the entire crew but still maintain an adequate work force to get the ship ready for decommissioning."

"We negotiated orders for more than 2,000 people in four days," CWO2 Joe M. Wesley, *Forrestal's* personnel officer, said. "Our mission was twofold: the needs of the ship and the needs of the service member. When we decommission *Forrestal*, only

about 850 people will be onboard."

According to Wesley, approximately 80 percent of the crew was satisfied with their orders. Some service members took *Forrestal's* decommissioning as an opportunity to leave the Navy early. Others will remain with the ship for about six months after inactivation as a caretaker crew, finishing any work that might have been missed and tying up loose ends, such as forwarding mail and clearing up disbursing matters.

"When we heard of the decision to inactivate *Forrestal*, the first thing we had to do was train the crew," Braley said. "They were preparing to put the ship back into operation and we had to get them geared to the fact that the ship was going away.

"We formed an inactivation department and trained crew members to preinspect closed-out spaces before we turned them over to Global Enterprises, an organization contracted by the Navy Inactivation Ships Maintenance Facility (NISMF). Global comes aboard and accepts spaces one by one using a checklist provided by *Navy Ships Technical Manual 050*," Braley continued. "Global maintains the mothball fleet for NISMF. Financially, its a sound move for the Navy to contract out this maintenance rather than provide crews to maintain the ships."

The inactivation process itself was accomplished by zones, with the electrical distribution to each zone as the driving factor. "We started from the bow and the stern and worked toward the center of the ship," Chesterman said. "As we stripped each space of its equipment and cleaned it, we secured the space, using a wire seal or sticker, if necessary, and then secured the power to that zone.

"We also started at the tanks and voids at the base of the ship and worked up, and in the island of the ship and worked down. Tanks and voids had to be cleaned and emptied to what is called low suction," he added.

Everything from pens and paper, pots and pans, to computers, telephones and mattresses had to be removed from the ship. The monumental task of organizing and tracking these supplies fell to the supply department. Lieutenant Debbie Anderson, assistant supply officer, said, "We took it in steps. For instance, we designated one day as telephone turn-in day. We staged pallets in the hangar bay and collected every phone on the ship. We did the same thing with most of our gear."

The responsibilities for Ensign Cheryl Fears, material officer, included collecting and disposing of the ship's consumables. "We collected approximately 5,000 pallets of consumable items and more than 150,000 pounds of hazardous materials," Fears said. "We stored most of the items in warehouses on base and redistributed as much as possible to various AirLant [Commander Naval Air Force, U. S. Atlantic Fleet] activities."

"After we completely stripped the ship, the crew executed two ship-wide FOD [Foreign Object and Debris] walkdowns," Andersons said. "We mustered the troops and went from stem to stern and from top to bottom to gather any items we might have missed," she concluded.

"Anything of use to the fleet came off the ship," added Braley. "For the most part, nothing went to waste."

"Aircraft carriers are considered a mature technology," Chesterman said. "You can compare it to trying to find parts for a '69 Ford or a '92 Honda. There are plenty of Honda parts but the Ford parts are hard to find. The same is true for carriers. *Forrestal* can provide a lot of parts to other ships."

Like a human organ donor, *Forrestal* lives on in other ships. Her propellers will be installed on board *Kennedy* (CV 67), and her anchors will find a home in *John Stennis* (CVN 74) when the newest carrier is outfitted.

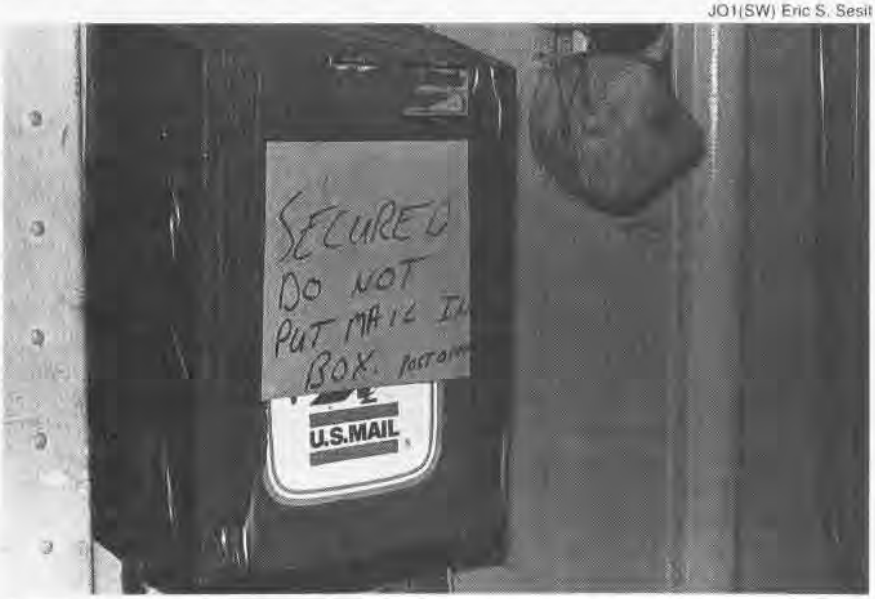
Items considered to have historical value were sent to the Naval Historical Center in Washington, D.C. "The person who gets first pick of anything on board the ship is the Navy curator," Braley said. (See *NANews*, May-June 1993, p. 34.)

According to Mark Wertheimer, assistant curator at the Naval Historical Center, "We look for items that represent the ships operational, technical and social history, including flags, bells, insignia, display boards and the helm. These items are catalogued and then made available to other Navy museums, veterans groups and non-Navy museums around the country. The equipment must be maintained in excellent condition just in case this equipment is put back into service."

"The hardest part of this entire process is letting go," Braley concluded. "Anyone who serves at sea develops pride in their ship. It's almost like buying a house. You live in it for three or four years, then you pack up all your belongings, turn out the lights and close the doors, knowing you'll never see it again. Only with a ship, you don't know what's going to happen to her. It's very hard to walk away." ■

Forrestal was decommissioned 11 September 1993. She will remain at Philadelphia Naval Shipyard, Pier Four, starboard side to, until her fate is decided.

JO1(SW) Eric S. Sesit



A sealed mailbox serves as a subtle reminder that the end is near. Everything of value was removed from the ship and spaces were cleaned and secured.

NAVCAD Program –

By JOCS(AW) Theresa L. Dunn

History repeated itself recently when the Naval Aviation Cadet (NAVCAD) program was once again placed "back on the shelf" by the Bureau of Naval Personnel, effective 1 October 1993.

The NAVCAD program, which began in 1935, was inaugurated to augment the input of Navy pilot trainees from the Naval Academy and the fleet. Cadets who completed the program were commissioned in either the Navy or Marine Corps.

"The problem I have with it emotionally is that, as a NAVCAD, you hate to see something go back on the shelf that you were brought up under."

The program, initially called V-5, then V-12 and subsequently NAVCAD, recruited pilots from university campuses and from the enlisted ranks who had completed at least two years of college. At one time, high school graduates were accepted into the program in times of national emergency.

Today, with the "needs of the Navy" ever changing, the program is no longer needed to provide the number of pilots required. For NAVCADS, this is nothing new. In 1966, near the end of the Vietnam War, the program was shelved until 1986 when it was reopened in order to man a 600-ship Navy.

"I understand the Navy's decision, and I support it," Rear Admiral Richard C. Allen, former Director, Assessment Division, Office of the Chief of Naval Operations, said. "The problem I have with it emotionally is that, as a NAVCAD, you hate to see something go back on the shelf that you were brought up under."

RAdm. Allen is one of many successful naval officers and former NAVCADs who are saddened by the decision. "There are enough NAVCADs who have served well that it has proven to be a cost-effective program throughout the years. I am troubled with the fact that we chose again to shelve it," he said.

He is not alone. Assistant Vice Chief of Naval Operations Captain Francis Herron, a long-time friend of RAdm. Allen, feels much the same. "I went into the Navy under the NAVCAD program in 1963," he said. "I had completed a two-year technical school before joining the Navy and was interested in flying. The Navy had the only program where you could get into aviation without a degree," he explained, "so I enlisted."

"We were a little hungrier than the other student pilots," Herron continued. "We knew if we didn't make the training, we would go back to the fleet as an E-2. That motivation carried us over. For years, we had more experience than people of the same rank because of the time [in service and flying]. Without the program you lose that."

Of all the Navy and Marine Corps aviators of WW II, more than 34,000 received training through the NAVCAD program. From 1935 to 1968, 62,000 aviators received their wings through the program. From 1986 to 1993, another 411 were trained. Today, 400 remain on active duty. Nine are flag officers.

NAVCADs have held positions at all levels of the Navy from Vice Chief of Naval Operations to cadets just entering the training pipeline. For example, former NAVCAD Vice Admiral Jerry O. Tuttle is the current Gray Eagle, the active duty Naval Aviator with the earliest date of designation. RAdm. Allen added, "While I was in flight training, it used to be a requirement to be a NAVCAD in order to be a *Blue Angel* pilot."

The difficulties experienced by NAVCADs without a college degree in competing for promotions with college graduate officers hastened the decision to shelf the program in 1966, according to the Chief of Naval Air Advanced Training that year. "....No matter how expert and motivated as pilots these officers may have been, they still had to fight their way through many difficulties in qualifying for promotion as all-around naval officers,"

RAdm. Richard Allen and Capt. Frank Herron, long-time friends, are both NAVCADs.

Back on the Shelf

Vice Admiral A. S. Heyward, Jr., said. "If all young officers start out on generally the same educational basis, the promotion competition will be tougher overall. The end result should be a relatively higher quality officer corps," he concluded.

RAdm. Allen disagrees. "I was disheartened when they put the NAVCAD program on the shelf. I feel that NAVCADs have done a tremendous job. I think they have helped their own regardless of the fact that they joined with two years or less of college.

"I don't feel that being a NAVCAD has held me back in any way, shape or form."

"When I was a cadet, there were two who came straight from the enlisted rank," he continued. "I feel they have held their own equally along with the Naval Academy grads and four-year graduates from Aviation Officer Candidate School [AOCS].

"It is true that many of us, in order to get your operational experience out of the way early on, did not have a chance to finish degree requirements in a timely manner, but I don't feel it has held any of us back," RAdm. Allen continued. "I personally don't believe that a significant amount of education is required to be a good pilot or leader in yesterday's, today's or tomorrow's Navy. I am somewhat biased because of my background, I guess, but that is just the way I feel.

"The NAVCAD program was a tremendous program that gave youngsters like me the opportunity to get on with their life and get into something that was very meaningful at a young age. I don't feel that being a NAVCAD has held me back in any way, shape or form," he added.

When asked if he thought the Navy would ever take it off the shelf again, RAdm. Allen replied, "Absolutely, I do! I realize we have a demand for higher education in the military and we pursue that quite actively, but quite frankly, I believe the history of the NAVCAD program would allow us to pull that program off the shelf and activate it again. I believe the NAVCAD program certainly would have something to offer at a cheaper cost than bringing someone in with a four-year education from a civilian institution or from the Naval Academy. You would also get a pilot at an earlier age that is still willing to serve in the Navy and the Marine Corps," he concluded.

Prior to WW II, only college graduates were accepted into the program, but the demands of war eventually allowed those with high school diplomas to be accepted. After WW II, two years of college was required until 1966 when, again, only college graduates were accepted.

When it first began, college grads got one year of flight training followed by three years of active duty as a cadet. A cadet fell between warrant officer and ensign, earned $75 a month pay and $1 per day subsistence and when discharged was expected to accept a commission as ensign in the Naval Reserve.

Allen entered the Navy through the NAVCAD program in 1959 after two years of college at Stout State University in Menomonie, Wis. He applied in Fall 1958 and was accepted in Spring 1959; his enlistment began in July. Although he had never flown in an airplane, the admiral said he became interested in the program when "a recruiter visiting the campus in my freshman year asked me to stop by his table and look at his brochures, which I did. He encouraged me to take the battery of tests. One thing led to another, and luckily I was selected to go."

Both RAdm. Allen and Capt. Herron agreed that their NAVCAD training included the well-understood segregation between officer students and enlisted students. The officer students rode a bus from place to place during training. NAVCADs marched in ranks. "When we went to the obstacle course in the heat of the day," said RAdm. Allen, "we would meet a full bus of officer students. We always wondered why we didn't get to ride the bus." But these minor obstacles didn't stop either of them.

In 1959, a NAVCAD was paid one-half of O-1 pay (approximately $111 per month) plus, when flying, $50 flight pay. "I lived in the barracks throughout the entire training, ate in the mess hall and didn't have to worry about subsistence or a living, so the pay was sort of above all that," Allen recalled. "On that, I bought a car. Like all good NAVCADS, I had to have wheels to get around and, of course, I bought one that I paid dearly for."

Although the training was the same for all pilots, NAVCADs wore different insignias and didn't receive their commission until after their carrier qualifications. "We also didn't get officer club privileges," Capt. Herron recalled.

"The night we completed our carrier quals was my most memorable experience ... we celebrated."

"The night we completed our carrier quals was my most memorable experience," he said. "We knew we were moving to the BOQ ... we celebrated!"

Whether the NAVCAD program remains on the shelf permanently or is reactivated again in the future, its legacy lives on in the high caliber personnel that it has produced. RAdm. Allen and Capt. Herron have more in common than wearing Naval Aviator wings, they are both proud to be NAVCADs. ■

Lexington Warms Texan Hearts

Story and Photos by Joan A. Frasher

Texans are noted for their big hearts and their big state. The aircraft carrier *Lexington* is known for her big size and big history. No wonder she fits in so well in her Corpus Christi home, where she is now a floating museum.

The first ship known as *Lexington* was an armed brig purchased by the Continental Congress on 13 March 1776. Originally, it was to be named the *Wild Duck* but was rechristened *Lexington* to inspire the crew to participate in the American Revolution with the same spirit as the farmers in that Massachusetts town where freedom first surged through the veins of the Colonists. This ship captured 18 enemy vessels before it was captured by the British in 1777.

The second ship was a 691-ton, 18-gun sloop-of-war launched on 11 June 1826. She saw action in the Mexican-American War and sailed to Japan with Admiral Perry in 1853. She was decommissioned on 26 February 1855.

An ironclad side-wheel steamer was the third *Lexington*. This ship joined the Western Flotilla at Cairo, Ill., on 12 August 1861, in time to support the river campaigns of the Union forces in the Civil War. She was decommissioned in July 1865.

The fourth *Lexington* was a converted battlecruiser originally to be named *Constitution*. However, before her keel hit the water, she was designed as an aircraft carrier, CV 2, and commissioned on 14 December 1927. She was at sea in the Pacific arena on that fateful day, 7 December 1941, and spent long hours keeping the Japanese at bay until the shattered U.S. Navy could be brought up to speed. She was sunk at the Battle of Coral Sea, 8 May 1942.

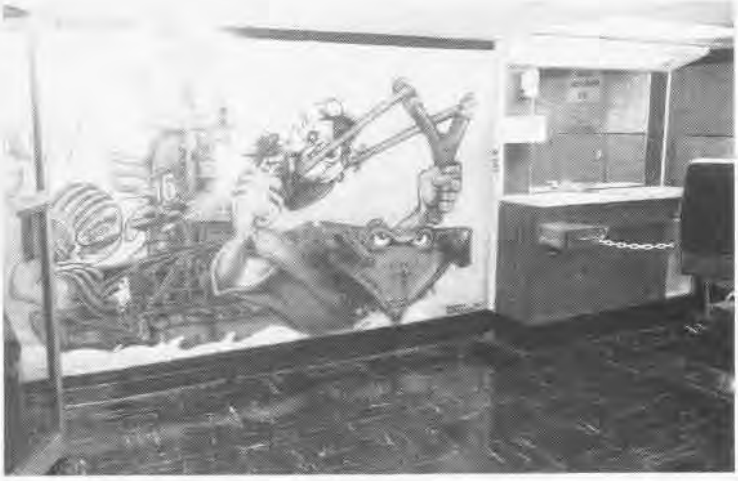
When CV 2 went down in the Coral Sea, the current and fifth large carrier was under construction and became the present-day *Lexington* (CV 16). She was launched 16 June 1942 and served her country valiantly until her decommissioning on 8 November 1991 as the Navy's training carrier (AVT 16).

The fact remains that *Lexington* differed from other aircraft carriers because of several factors. She was second of the big carriers and had a main deck larger than three football fields. She was the second *Essex*-class carrier to be commissioned and the fourth to enter service. At that time, the *Essex* class comprised the largest carriers in the fleet. *Lexington* served the U.S. longer and set more records than any carrier in the history of Naval Aviation. She had two forward catapults and completed over 300,000 launches from her starboard catapult and over 500,000 arrested landings. She was the first carrier to conduct flight operations while rounding Cape Horn and the first carrier to sail with women in the crew. Unlike many WW II ships, *Lexington* was never camouflaged; she was painted in Measure 21, an overall Navy blue. Consequently, the Japanese pilots reported seeing a great blue ship that they had reportedly sunk, a ghost ship. This was further documented by the propagandist Tokyo Rose. The nickname "Blue Ghost" emerged and remained with the ship.

Robert H. Earley, executive director of the museum, spoke warmly of the carrier and explained her acquisition

A TF-9 is one of the static displays on the carrier.

A TA-4 from Lexington is viewed on the flight deck.



Above, carrier air traffic control center as it appears today. Right, a Hank Caruso facsimile is displayed on a bulkhead in the barber shop.

The oversized leather chairs await flight crews in one of the ready rooms.

Mess line needs only food and sailors to be ready to serve a meal.

A view from the bridge shows the flight deck and some of the skyline of Corpus Christi.

process. "The proposal was made to the Secretary of the Navy and his staff. At that time, three cities were vying for the carrier: Corpus Christi, Texas; Mobile, Ala.; and Quincy, Mass., [the current *Lexington* was built by the Fore River Shipyard in Quincy]. The proposal included transportation of the carrier to her destination [from Pensacola, Fla.], description of the mooring method, assurance to the Navy that she would be protected from hurricanes [by her sheltered position in the bay], an environmental assessment plan, a maintenance plan, and a financial feasibility plan that was completely self-supportive [through ticket admissions, the gift shop and snack bar and donations] and would foster a program of docents to aid the visitors. The museum is run by a board of directors and is a nonprofit charitable organization known as the USS Lexington Museum On The Bay Association." The board consists of an executive director, deputy executive director and 17 civic leaders.

Ample parking for the museum is available and typical seashore stores line the road in front of the carrier. A water taxi offers the curious a scenic tour around the side of the ship not viewed from the shore and the rest of the Corpus Christi harbor. Approaching the impressive carrier, a visitor cannot help but feel a great deal of American pride and nostalgia for a time past. The overall appearance of *Lexington* is outstanding. The floors shine with the pride of her maintenance crew. Presently, she has one person dedicated to maintaining her 12 display aircraft and about a dozen maintenance personnel who provide the upkeep of the carrier.

As of 9 September 1993, just shy of her first anniversary as a museum, 474,000 visitors had passed through the admittance desk and viewed the grandeur of the "Blue Ghost." This was more than double the amount of visitors the staff had originally expected. Large tour groups are already putting the docents through their paces. Many

departments are ready for public inspection. The barber shop cut many a head of hair in its day and now boasts a mural of a Hank Caruso facsimile of *Lexington*. Sick bay is as pristine as any operating room. The mess line is shiney and appears ready to serve three squares a day to the 1,400 personnel onboard the ship when she was an active AVT. Various wardrooms await their officers.

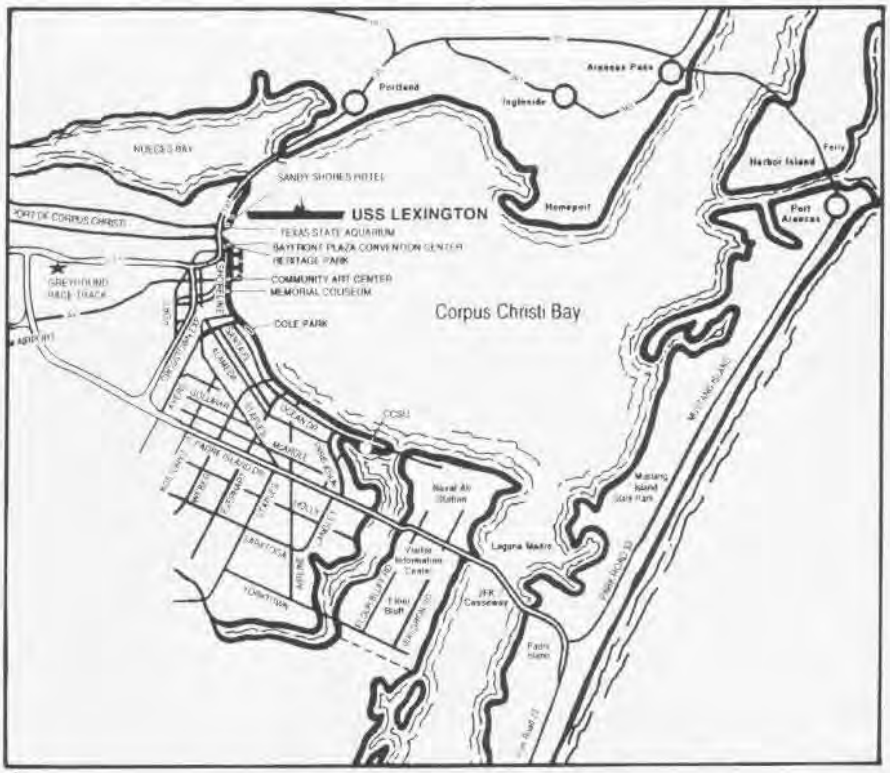
The captain's quarters now differs only in that you do not have to knock on the door for admittance. The ready room (used when it was not an AVT) is prepared to receive flight briefings from air ops. The leather chairs are empty and the coffee mugs hang from pegs on the bulkhead, needing only to be used. A copy of *Naval Aviation News* is on the reading table to keep the crews informed. Air operations is ready for business – it needs only the Navy personnel to man it. Due to open soon are the library, the chapel and an auxiliary generating room. Of the ship's 16 decks, 8 are open to the public, with 3 more planned for display. The most difficult renovation – the engine room – remains sealed but work is in progress.

The bridge affords the visitor a panoramic view of not only the ship's deck but the surrounding area of Corpus Christi and points of interest. More than that, just sitting in the captain's chair allows the visitor to fantasize about how it would feel to be in command of such an awesome ship.

USS Lexington Association intends to maintain a naval air training theme utilizing aircraft that either flew off the carrier or are of WW II vintage. On the flight deck, nine static aircraft displays greet visitors, while on the hangar deck, an SNJ *Texan* recalls bygone days of the training command. The SNJ was the advanced trainer in the forties and the primary trainer in the fifties. Suspended from the top of the hangar is an OY-1 *Sentinel* and an N3N "Yellow Peril." The atmosphere will remain truly *Lexington*ian.

Resting majestically on the bay at Corpus Christi, *Lexington* (CV/CVA/CVS/CVT/AVT 16) is a constant reminder of and tribute to all who served aboard her and her namesakes. ■

Museum On The Bay



Sick bay is as pristine as any operating room today.

Lexington is open for tours daily:

Monday–Sunday, 9:00 a.m.–5:00 p.m.
(closed Christmas Day)

Admission:	
Adults (18 yrs.+)	$7.00
Children (4-17 yrs.)	$3.75
Children under 3	Free
Senior citizens (60 yrs.+) and active Military (must show I.D.)	$5.00

Photographer's Mate

By JO1(SW) Eric S. Sesit

In the air or underwater, PHs are on the scene wherever the Navy does its job.

PH1(AW/DV) Tilton

How would you like to wear a suit and tie at your next duty station? If you're a Photographer's Mate (PH), this is a good possibility, provided you get the right duty.

You've probably seen these enlisted folks at a retirement ceremony, a reenlistment or a cake-cutting ceremony, waiting for just the right moment to snap their shutters. Or you might have seen them in Somalia, or Kuwait, documenting events for military analysts or for posterity. But, definitely, you have seen their work. It's published in magazines and newspapers around the world and seen on television sets throughout the fleet, as well as commercial and public broadcast stations. And they will proudly declare that the PH rating is the most exciting and rewarding field in the Navy.

"Well, not quite at first," PH1 Inez F. Libert said. Libert is the leading petty officer for Still Media Services at the Naval Imaging Command in Washington, D.C. "Many of our younger sailors spend their time shooting 'grip and grins' [award ceremonies] and printing black and white photographs. We start them in black and white because it forms the basis of all photographic work," she explained.

"It gets a little boring just shooting ceremonies all the time," PH3 Cynthia J. McGuirk said. "I like taking photos but I have more fun shooting something interesting or exciting."

Interesting? Exciting? Fortunately, the Navy offers photographers one of the most visually exciting arenas to practice their craft. But paying dues remains the Navy way and this maxim holds true for PHs. After "A" school, grip and grins, as well as portrait photography, will remain mainstays of the PH rating for a long time to come.

"We put our students through a 10-week course of instruction," PH1 Dennis D. Taylor, an instructor at the Navy's photo school in Pensacola, Fla., said. "We take people, who in some cases have never even held a camera, and teach them the fundamentals of composition, exposure, shooting, processing and printing. Then we touch on color photography, large format cameras and quality control."

The A school is 10 weeks long but plans are being made to increase it to 14 weeks. According to Taylor, an additional two weeks of electronic imaging, the photo technology of the future, is scheduled to be incorporated into the schedule in 1994. Also, there is a possibility the school will move to Fort Meade, Md., as a part of a combined Defense Photo School.

A PH's training doesn't end in A school, though. The job involves much more than taking the pretty pictures we see. Its specialties require advanced training, and advanced training means NECs (Navy Enlisted

Classification) codes.

Maintaining cameras and accessories in proper condition requires a five-week school in equipment maintenance for which the 8191 NEC is earned. Repairing equipment is taught at a three-month school culminating with the 8192 NEC.

But what if you want to be in pictures? Motion pictures, that is. The Photographer's Mates can put you there. A motion picture "C" school is taught at Pensacola. Placing emphasis on establishing a full-length production, students learn the intricacies of shooting video. A more advanced school, located at Syracuse University in New York, trains PHs in video editing.

CWO3 Rhonda L. Bailey is the division officer for Motion Media at the Imaging Command. Her job casts her in the role of a television producer. "We do naval productions for education and training," Bailey said. "Depending on our client, we develop the script, contract the actors or voice talent, arrange production times and shoot and edit.

Want high visibility? How about the nine PHs responsible for videotaping virtually every step the President of the United States makes? PHC E. G. Noccillo of White House Television said, "We document, on video, the President of the U.S. These tapes are sent to the National Archives and eventually to the presidential library. We tape all open and most closed events at the White House. We also go where the president goes. If the president jogs, we jog."

On call 24 hours a day, these PHs wear suits and ties to work. "For me, it's the most rewarding duty I've had," said Noccillo. "I'm in daily contact with the decision makers of the world. It is really exciting to be there when history is made, such as the recent signing of the Middle East Peace Accord."

Don't get the impression that a PH's life is all fun and glory. Their main mission is fleet support and a perfect example of this is TARPS (Tactical Air Reconnaissance Pod System). "TARPS provides air reconnaissance and bomb assessment damage. The pod weighs 2,000 pounds and hangs under an F-14," PHCS(AW) Harry J. Blacker said. "PHs assigned to an F-14 squadron maintain the pod and load and unload the film."

PH2 James E. Finnigan served on *Midway* (CV 41) during Desert Storm. "Our mission onboard a carrier is to support operations and intelligence. During Desert Storm, we processed the TARPS film and provided maps for planning purposes."

Finnigan also tells a tale of a more grisly aspect of the PH rating. After a fire onboard *Midway* in 1990, PHs were called in to take photos of the physical damage to the ship. They also photographed the autopsies of the dead crewmen. "By photographing the bodies and the compartment where the fire occurred, investigators gathered important information about how and where the fire started and how the crewmen died. This information can be used to find better methods of shipboard firefighting," Finnigan added.

Fascinating stuff, right? Well, if you're thinking about converting to the PH rating, the opportunities are there. According to PHCM(AW) Ted L. Salmons, there are more than 1,200 PHs in the Navy with a manning level currently at 88 percent. "So much for the myth of our rating being overpopulated," Salmons, the PH detailer, said. "We are crowded at the senior levels, but advancement to second and first class remain good with hard work and lots of studying. And we take conversions from other ratings quite regularly.

The new sea/shore rotation recently revised the PH's sea time, reducing it in most cases. However, third class petty officers can now plan to spend an additional 15 months at sea for a total of 60 months sea time and 36 months ashore. Second class PHs will spend 45 months at sea and 36 months on shore. First class petty officers and above will split their time between sea and shore, 36 months each.

"For the career sailor, the opportunity for advancement is there. We are the only rating where our officer community comes exclusively from the enlisted ranks, earning their commissions through the Limited Duty Officer or Warrant Officer programs," Salmons continued. "The reason for this is that we remain a very technical rating and we need that technical expertise at the officer level.

"There are people in our community who do their time and get out after their first tour, and that's fine. But to advance in our rating, you really have to love what you do. Lots of sea time helps, also.

"We fly, we sail and we go underwater," Salmons concluded. "Wherever Navy men and women are working, PHs will be there to document their story."

"The only way to excel in photography is practice," Libert said. "Photography for me is my hobby as well as my job. I can't imagine going anywhere without 20 pounds of gear hanging from my shoulder." ■

PHAN Todd Lackovitch

Two PHs remove an infrared sensor from a Tactical Air Reconnaissance Pod System (TARPS) pod on a VF-84 F-14A aboard Theodore Roosevelt (CVN 71) during Operation Deny Flight.

The Amphibian Scouts, Part 2

By Hal Andrews

Amphibian Scouts, Part 1," *Naval Aviation News*, September-October 1993, related the events that resulted in the Navy's Bureau of Aeronautics (BuAer) contracting for three experimental amphibian scouts in 1931. All three contracts were signed on 30 June 1931. Delivery was stipulated to NAS Anacostia, D.C., for trials in Spring 1932. The first of the three, alphabetically, was covered in Part 1; parallel accounts of the other two follow.

XS2L-1

Having personally promoted his ideas for a small scout seaplane or amphibian to BuAer starting in 1930, Grover Loening put the small staff of his Grover Loening Aircraft Company to work in early 1931. A mockup of his concept for the enclosed cabin biplane design had been inspected by BuAer officers in the spring, and a model was built for testing in the Navy's wind tunnel at the Washington Navy Yard by the time the contracts were signed. Unlike the other two based on BuAer's own design, the XS2L-1 would not carry bombs.

August wind tunnel results set back the head start advantage; revision of the tail design was necessary. Lengthening of the hull was also suggested. Before subsequent tests showed satisfactory characteristics, both were required. Loening's requested two-month delay in delivery was approved in October.

With BuAer's relook at ship-based scout requirements starting in September, and Loening's recognition of the weight impact of meeting design requirements, Loening proposed deleting the wheel landing gear for weight reduction, with the option of additional fuel for greater range. However, BuAer elected to proceed as contracted.

November brought Loening proposals for specialized versions of the design, suggesting the contract's option airplane be purchased using the Navy's new 600-horsepower, twin-row Wright R-1510 engine. The 15-foot folded width requirement was also questioned since carrier use seemed to be losing interest. Over December and January, the option proposal was rejected, and less than 15-foot folded width maintained. Reengining the XS2L-1 with a 500-horsepower Pratt & Whitney (P&W) R-1340 Wasp in place of its R-985A was also considered and dropped. Internal BuAer deliberation resulted in sticking with the original objective: Was a small amphibian scout achievable?

Late winter and spring saw progress, along with changes. The wing airfoil section was changed and larger wheels were to be used. A catapult launch cart was ordered from the Naval Aircraft Factory (NAF). Design approval actions and component testing continued into the summer with requested delays granted to push delivery into the fall. Tail deflections in proof loadings, replacement of the mechanical brake system with a hydraulic one, and landing gear drop test problems caused further delays, the XS2L-1 finally flying in early November.

Except for a minimum-damage landing accident due to the gear not being fully down, company flight tests went well. The XS2L-1 flew to NAS Anacostia on 21 November, after the usual contract action (and penalty) for excess weight – significantly less than that of the XSG-1. Landing gear problems delayed the demonstration into December, with uncommanded stabilizer retrim during a dive causing further delay. Trials finally began in January, proceeding fairly well, including gun-firing tests, into mid-February when the airplane was ferried to NAS Norfolk, Va., for water and arresting trials. Problems with the arresting wire catching on the tail wheel strut and resulting damage to its attachment bulkhead, and water damage to the stabilizer, hull plates and the wheel pocket fairings in rough water tests required repairs.

There were also deficiencies in both land and water operational characteristics, particularly with respect to spray in takeoff runs. Back at Anacostia, in mid-March, with minor repairs, the radio was installed and tested, followed by catapult tests at

XS2L-1

the Washington Navy Yard. These were suspended when excessive drop was experienced on launch, and final trial flights were conducted at Anacostia. The last checked the effect of increasing elevator deflections obtained to the design value, bringing the trials to a close before the end of the month. The trials report recommended acceptance as an experimental type with suitable repairs and modifications, but found the XS2L-1 unacceptable for service use. In late April, the XS2L-1 went back to Loening, where repairs and changes were completed by early June. Following another landing gear accident and its repair, the delivery was in late June for service at the Naval Academy in Annapolis, Md. In late July, a further landing gear collapse while turning around on the ramp following a flight to Norfolk led to a final flight as a seaplane to the NAF, where it was stricken.

XSS-1/2

Sikorsky set out on the XSS-1 project with BuAer providing the available data for its Design 106, including both

XSS-2

XSS-2

XS2L-1

XS2L-1

XS2L-1

wind tunnel and water basin results. Initial progress was slow. The mockup wasn't completed until November, by which time changes in the radio and electrical system had been agreed upon. The Navy's relook at speed and range for the amphibian scouts resulted in Sikorsky reassessing the XSS-1 as related to its own earlier alternate design proposal. With the Navy on-site Inspector's unfavorable reaction to significant aspects of the mockup, and recognition that at least an R-1340 engine in place of the R-985A would be essential, Sikorsky proposed BuAer consider a revised version of its X1200 design, incorporating changes addressing BuAer's prior criticisms of that design, rather than continuing with the existing XSS-1.

After considerable internal discussion, BuAer decided on a new start. Action to implement the change resulted in a January 1932 contract revision, substituting the R-1340D powered, XSS-2 based on Sikorsky's X1200, for the XSS-1; with additional payment for replacing the discarded engineering work. The project's clock started over, with delivery to Anacostia in September.

Design progress was again slow, the detail design of the inboard wing presenting a major challenge involving structural, aerodynamic, wing folding, cockpit access and pilot visibility considerations. With bombing deleted, specs were adjusted to only scout type maneuvers. The necessary catapult launching saddle was ordered from the NAF. In May, the new mockup was inspected. Changes in areas such as the rear cockpit with its minimum available space and handling provisions afloat resulted in reinspection and approval in June. As design proceeded, both Sikorsky and BuAer became concerned with growing overweight. BuAer also requested that Sikorsky study wing flaps to reduce landing speed; an additional set of wings with flaps was subsequently ordered to be flight tested on the XSS-2 after completion of Navy trials. Construction and component testing continued over the next months, with stub wing section construction and tests and fuel tank vibration test failures delaying progress. Further delays in delivery were recognized without paperwork follow-ups, and by year's end, the Inspector estimated delivery in late March 1933.

Finally flown in early April, performance and directional stability were deficient, and the landing gear needed considerable rework. Among performance improvements was a cockpit enclosure for the crew; and the vertical tail was extended a foot in height, providing adequate stability.

With the airplane completed, and the needed "fixes," overweight had increased considerably. The usual guarantee change with penalty – in this case some 5 percent of the basic contract cost – was made before the XSS-2 was flown to Anacostia on 22 May. Following demonstration and initial trials, failures on the first catapult shot at the Navy Yard resulted in cancellation of further catapult testing, and the XSS-2 went to Norfolk for the usual arresting and water tests. The hull suffered sufficient damage in moderate waves to suspend any testing in heavier seas. It was also noted that the XSS-2 was not satisfactorily controllable either on land or in the water except in very light winds. The trials were completed in June, with acceptance as an experimental type for testing the flapped wings. The airplane returned to Sikorsky for repairs and changes, and replacement of the wings with the flapped ones.

With little progress by fall, Sikorsky indicated the company was not interested in any further effort on the project. BuAer felt the flap tests had been so delayed as to be of no further value. It was agreed to fly the airplane to the NAF in December for ground tests, scrap the extra wings and close out both contracts without further payments to Sikorsky – some 10 percent of the original airplane contract plus 95 percent of the flapped wing. Hardly an auspicious ending for BuAer's amphibian scout program.

Appreciation is extended to the National Archives staff, particularly Richard Von Doenhoff; the National Air and Space Museum; David Ostrowski; and JO1(SW) Eric Sesit for assistance.

XS2L-1

Span	34'6"
Length	30'7"
Height	14'7"
Engine: P&W R-985A	400 hp
Maximum speed (S.L.)	130 mph
Service ceiling	12,400'
Maximum range (overload)	633 mi
Crew: (pilot & radioman/gunner)	2
Armament: One flexible .30 machine gun	

XSS-2

Span	42'
Length	33'1"
Height	14'7"
Engine: P&W R-1340D1	550 hp
Maximum speed	154 mph
Service ceiling	14,800'
Maximum range (overload)	618 mi
Crew: (pilot & radioman/gunner)	2
Armament: One flexible .30 machine gun	

First in Defense

A History of USS Forrestal (CVA/CV/AVT 59)

By Steven D. Hill

On July 1 1945, the United States Navy had a total of 28 fast carriers in commission: 20 *Essex*-class CVs and 8 *Independence*-class CVLs. These carriers embarked an effective mix of aircraft which enabled the fleet to perform a vast array of missions. This powerful armada, however, was already obsolete; although the aircraft onboard the carriers were excellent machines, they were all powered by piston engines. In the skies over Germany, Army Air Force escort fighters had already had a tough job trying to protect the heavy bombers from the Luftwaffe's Messerschmitt Me 262, the first operational jet fighter, since the type was introduced during the summer of 1944. Clearly jet aircraft were the way of the future, but for the Navy the problem was developing a jet that could effectively and safely operate from the deck of an aircraft carrier, with the same high performance as its land-based counterpart.

After the war, on 18 July 1947, President Truman signed the National Security Act, which among other things, aligned the Army and Navy under the Department of Defense. It also established the Air Force as a separate branch, equal to the Army and Navy. The roles and missions of the the services were the subject of fierce debate over the next two years, and climaxed in what came to be known as the "Revolt of the Admirals."

At this time, a war was being waged in Washington, D.C., between the Air Force and the Navy involving the operational employment of the new atomic arsenal. The Navy was attempting to convince Congress that its carriers could deliver atomic bombs just as effectively as the Air Force could with its land-based bombers. The Navy proposed to construct a huge flush-deck aircraft carrier capable of operating a heavy attack aircraft. The proposed carrier, *United States* (CV 58), was approved and was laid down. The Air Force, however, was adamant that priority should be given to its gigantic Convair B-36, an intercontinental strategic bomber, known later as the *Peacemaker*. The fate of CV 58 was sealed on 27 March 1949 when Secretary of Defense James V. Forrestal resigned. Forrestal had been a key supporter of the new carrier, but his successor, Louis Johnson, was not allied to the Navy's cause and canceled the *United States* on 23 April 1949. Secretary of the Navy John L. Sullivan resigned in protest. The strategic bombing role was awarded to the Air Force and for the time being the issue seemed to be resolved.

Back in the fleet, early operational test and evaluation of jet fighters aboard the *Essex* and *Midway*-class carriers indicated that the interim mix of piston and jet aircraft was far from ideal. With the difference in speed between the types, and the enormous fuel consumption of the jets, flight operations were complicated and required careful planning. Above all, safety was being compromised. It soon became clear that the *Essex* and *Midway*-class carriers, little changed since WW II, would require extensive refits in order to safely operate jets.

One major problem with early jets that had an enormous impact on safety was very quickly identified. Early jet aircraft suffered from poor engine response to throttle inputs by the pilot. Whereas piston engines responded rapidly to requests for full power, the jet engines required time to "spool up." Rapid throttle response was mandatory for aircraft landing on carriers at sea. Increased danger was also experienced because of the straight-deck design of the *Essex* and *Midway*-class carriers. An aircraft could not go around if it failed to engage an arresting wire, and despite the series of barricades meant to protect the aircraft parked forward on the flight deck, collisions were common.

On 30 October 1950, the Secretary of the Navy approved a budget which included a request for a new aircraft carrier. This vessel eventually became *Forrestal* (CV 59). Her initial design was based on the concept of the canceled *United States*. She was originally to have been a flush decker with one catapult each on her starboard and port sides, and two catapults forward on her bow. The landing area was aft along the centerline of the flight deck. Three of the catapults were serviced by a deck edge elevator; a fourth elevator was positioned in the landing area along the centerline of the flight deck. Displacing in excess of 60,000 tons and with a length of 1,036 feet, *Forrestal* was huge. The driving factor behind her design was, again, the requirement for her to operate heavy attack aircraft, such as the AJ *Savage* and the forthcoming Douglas A3D *Skywarrior*.

Early in her construction, *Forrestal*'s design was altered in order to accommodate new technology that would eventually solve the safety problems experienced when operating jet aircraft from carriers. First, it was decided to incorporate an angled deck into her design. This meant aircraft on final approach would have an unobstructed path enabling them to either touch and go, bolter or trap. Second, steam catapults were installed vice the originally planned powder-charged ones. The steam catapults not only saved weight but had been tested and proven by the British on HMS *Perseus* during trials in August 1950. Interestingly, the three innovations that enabled the safe operation of jets aboard carriers – the angled deck, the steam catapult, and the mirror landing system – were all originated by the British. Yet, they eventually gave up on conventional fixed wing aircraft carriers, opting instead for V/STOL (vertical/short takeoff and landing) carriers,

a commitment that was regretted during the Falklands War in 1982.

Forrestal, with her enclosed hurricane bow and large port side sponson supporting her angled flight deck, was launched on 11 December 1954 by Newport News Shipbuilding and Drydock Company, Va. She was sponsored by Mrs. James V. Forrestal, widow of the former Secretary of Defense. On 1 October 1955, the carrier was commissioned, Captain R. L. Johnson commanding. The Navy now had a truly modern aircraft carrier capable of operating a broad spectrum of aircraft safely. *Forrestal*'s design proved extremely sound and was the basis for all subsequent aircraft carriers built for the U.S. Navy.

Forrestal's operational history began in January of 1956 when aircraft of Air Task Group (ATG) 181 flew out to the new supercarrier to conduct carrier qualifications. On 3 January, Commander ATG-181, Commander Ralph L. Werner, made the first arrested landing aboard *Forrestal*'s flight deck in a North American FJ-3 *Fury* of Fighter Squadron (VF) 21. Within an hour of *Forrestal*'s first-ever arrested landing, her steam catapults were put to the test as Cdr. Werner's FJ-3 was launched from the starboard bow catapult.

Following her shakedown cruise with ATG-181 embarked, *Forrestal* responded to her first crisis. Egyptian President Gamel Abdel Nasser had nationalized the Suez Canal, thereby threatening French and British access to Middle Eastern oil. With the aid of the Israelis, the two colonial powers conspired to attack Egypt and remove Nasser from power. The United States' Sixth Fleet operating in the Mediterranean, led by carriers *Coral Sea* (CVA 43) and *Randolph* (CVA 15), was ordered to be prepared for any contingency. Antisubmarine carrier *Antietam* (CVS 36) was also ordered to the area from Norway and *Forrestal*, with Carrier Air Group (CVG) 1 embarked, departed Norfolk, Va., on November 6. Tensions were extremely high and the possibility of a nuclear exchange was not entirely out of the question.

Forrestal, with CVG-1 embarked, lies off the coast of southern France during her first Mediterranean cruise in 1957.

During the crisis, *Forrestal* operated in the eastern Atlantic and was ready to enter the Mediterranean should her services be required. The confrontation was soon resolved without a military engagement, and *Forrestal* returned to Norfolk, arriving on 12 December.

Preparations for *Forrestal*'s first scheduled deployment resumed and on 15 January 1957 she sailed from Norfolk bound for the Mediterranean with CVG-1 embarked. During her early deployments with the Sixth Fleet, *Forrestal*'s primary function was to show the flag. In this, her role was not unlike that of the ship-of-the-line during the days of sail. She made numerous port visits throughout the Mediterranean, demonstrating the power for peace that she represented. *Forrestal* visited no less than 10 different ports on her first cruise and returned to Norfolk on 22 July.

In July 1958, a crisis in Lebanon developed, and President Eisenhower sent Marines ashore to stabilize the situation. As in the Suez Crisis in 1956, *Forrestal* deployed on short notice, embarking CVG-10 at Mayport, Fla., before heading toward the eastern Atlantic. Again, *Forrestal* was not called upon to engage in combat operations and she returned to Norfolk on 17 July.

As United States participation in the war in Vietnam began to escalate, the Navy began the practice of deploying Atlantic Fleet carriers to the Pacific in order to operate off Yankee Station in the Gulf of Tonkin. *Independence* (CV 62), with Carrier Air Wing (CVW) 7 embarked, was the first Atlantic Fleet flattop to do so, completing a WestPac/Vietnam cruise between 10 May and 13 December 1965. *Forrestal*'s turn came in 1967.

On 6 June 1967, *Forrestal* departed Norfolk with CVW-17 embarked, which was well equipped for combat. Both fighter squadrons, VFs 74 and 11, operated the F-4B *Phantom II*, while the medium attack squadron, VA-65, brought its A-6A *Intruders* aboard. The light attack community was represented by VAs 46 and 106 each operating A-4E *Skyhawks*. Carrier Air Early Warning Squadron (VAW) 123 deployed with E-2A *Hawkeyes*, and Reconnaissance Attack Squadron 11 provided aerial reconnaissance with RA-5C *Vigilantes*.

Angelo Romano

A-7E Corsair IIs from VAs 37 and 105 prepare to launch from the deck of Forrestal during the carrier's first post-SLEP cruise in 1986.

Arriving on Yankee Station on 25 July, *Forrestal* immediately began launching aircraft of CVW-17 on their first combat sorties over North Vietnam. After four days of intense operations *Forrestal* and CVW-17 had yet to lose a single aircraft over North Vietnam. The *Forrestal*/CVW-17 team was looking forward to a successful deployment.

The early morning of 29 July began with a strike. The second strike of the day was preparing to launch when a Zuni rocket mounted on an F-4B shot across the deck, impacting an armed A-4E's drop tank. A chain reaction sent debris, smoke and flame skyward as armed aircraft began to explode. Seven F-4B *Phantoms*, 12 A-4E *Skyhawks* and 2 RA-5C *Vigilantes* were destroyed. The most tragic loss of all were the 134 *Forrestal* crewman and CVW-17 personnel who died in the inferno.

Forrestal arrived at Cubi Point, R.P., on 31 July. Initial inspection of the smoldering carrier revealed seven holes in her flight deck caused by the general purpose bombs loaded on CVW-17 aircraft. Most of CVW-17 returned to the United States with *Forrestal*. VA-65, however, stayed on Yankee Station and continued to fight from the deck of *Constellation* (CVA 64).

Following her harrowing experience off the coast of Vietnam, and subsequent repairs, *Forrestal* resumed regular deployments to the Mediterranean and operations with the Sixth Fleet.

In July 1972, *Forrestal* welcomed the Grumman F-14A *Tomcat* to her deck. Carrier suitability trials for the new fleet defense fighter were conducted, though it was not until June 1986 that she began her first operational deployment with F-14A-equipped fighter squadrons.

Between January 1983 and May 1986, *Forrestal* participated in the Service Life Extension Program (SLEP), which is the most extensive refit possible for a carrier and is said to add an additional 30 years to the life of a ship. When *Forrestal* emerged, it seemed she easily would sail on into the 21st century.

On 2 June 1986, *Forrestal* got underway for her first post-SLEP deployment. CVW-6 was embarked for the supercarrier's eighteenth Mediterranean cruise. The *Forrestal*/CVW-6 team subsequently completed two more Mediterranean deployments prior to August 1990.

On 12 April 1990, *Forrestal* and CVW-6 had just returned from another routine Mediterranean deployment. VAs 37 and 105, CVW-6's A-7E *Corsair II*-equipped light attack contingent, were preparing to disestablish. But the crisis in Iraq forced two other squadrons, VAs 46 and 72, to halt their transition to FA-18 *Hornets* and deploy to the Persian Gulf aboard *John F. Kennedy* (CV 67).

On 1 October, Strike Fighter Squadrons (VFA) 132 and 137, each equipped with FA-18A *Hornets*, officially joined CVW-6, filling the void created by the departure of VAs 37 and 105. CVW-6 had not operated with *Hornets* yet, and it would take time to integrate the new strike fighter into the air wing team.

Beginning 29 November, *Forrestal* and CVW-6 conducted refresher training and advanced/hostile phase training until 23 December. Then, three days after the air war against Iraq began on 17 January, *Forrestal*, with CVW-6 embarked, was ordered to deploy to southwest Asia. The deployment did not take place, however, and again *Forrestal* conducted advanced/hostile phase training for three weeks. When the ground war started, another order to deploy was issued, and again, several days later, was canceled.

In May, *Forrestal* and CVW-6 welcomed dependents aboard for a short day cruise off the coast of Florida. The cruise provided an excellent opportunity for the Navy to demonstrate to the public exactly what its carriers had been doing in the gulf. Among the day's most impressive participants were the *Kestrels* of VFA-137 under the command of Commander Craig B. "Slim" Henderson. The entire *Forrestal*/CVW-6 team looked professional and sharp. They had done an excellent job in preparing for a deployment to the Mediterranean and what was still an unstable and uncertain political climate in Iraq. Finally, on 30 May 1991, *Forrestal* departed Naval Station, Mayport, Fla., for what was to be her final voyage overseas.

Although the allied coalition had concluded combat operations against Iraq in March, Sadam Hussein, with the military forces he had left, began an assault on the Kurds in the northern region of his country. The allies soon began air drops, supplying the besieged Kurds with food and other supplies under the code name Operation Provide Comfort.

Forrestal, with CVW-6 embarked, relieved *Theodore Roosevelt* (CVN 71) and CVW-8 on 14 June. Operations in support of Provide Comfort began immediately. On 8 July, an E-2C from VAW-122 developed an engine fire that soon burned out of control. The crew of five ejected from the stricken aircraft which continued flying toward Syrian airspace, making it necessary to destroy the E-2C. VFA-132's command history explains what happened next. "LT William 'Maggot' Reilly of the Privateers responded. Upon receiving authorization to shoot down the aircraft, LT Reilly selected the 20mm gun of his *Hornet* and splashed the *Hawkeye*." This was the first and only "kill" achieved by an aircraft flying from the deck of *Forrestal* in the carrier's 37-year history.

Forrestal's final deployment came to an end on 21 December 1991. On 5 February 1992, she was redesignated a training carrier (AVT 59), relieving *Lexington* (AVT 16) which was decommissioned after 49 years of service. After changing home ports from Mayport to Pensacola, Fla., *Forrestal* reported to Philadelphia Naval Shipyard, Pa., for a refit, and that is where she remains to this day. On 11 September 1993, AVT 59 was decommissioned.

If it is true that a ship like a person has life, then the following can be said of *Forrestal*'s life. At birth, she was the most powerful warship in the world. She did for carriers what HMS *Dreadnought* did for big gun battleships. *Forrestal* was the first supercarrier, and although she may have served only four days on the line, it was not necessary to risk her. By 1967, she had three sisters, three improved sisters, and one nuclear cousin to exercise the might of Naval Aviation. *Forrestal*, forever first in defense, had served her purpose.

Mr. Hill is an archives technician in the Naval Aviation History Branch, Naval Historical Center.

Forrestal (CVA/CV/AVT-59) Deployments

Shakedown
Guantanamo Bay, Cuba
24 January to 31 March 1956

ATG-181	Tailcode: I
VF-41	F2H-3
VF-21	FJ-3
VA-86	F7U-3M
VA-42	AD-6
VC-12 Det 42	AD-5W
VC-33 Det 42	AD-5N
VAH-7 Det 42	AJ-2
HU-2 Det 42	HUP-2

Azores
(Suez Crisis)
7 November to 12 December 1956

CVG-1	Tailcode: T
VF-171	F2H-3, -4
VA-15*	AD-6
VA-76	F9F-8B
VFP-62 Det 4	F2H-2P
VA(AW)-33 Det 42	AD-5N
VAW-12 Det 42	AD-5W
HU-2 Det 42	HUP-2

Mediterranean
15 January to 22 July 1957

CVG-1	Tailcode: T
VF-14	F3H-2N
VF-84	FJ-3M
VA-76	F9F-8B
VA-15	AD-6
VAH-1	A3D-1
VAW-12 Det 42	AD-5W
VA(AW)-33 Det 42	AD-5N
VFP-62 Det 42	F2H-2P
HU-2 Det 42	HUP-2

Mediterranean
2 September 1958 to 12 March 1959

CVG-10	Tailcode: AK
VF-102	F8U-1
VA-12	A4D-2
VA-104	AD-6
VAH-5	A3D-2
VAW-12 Det 42	AD-5W
VA(AW)-33 Det 42	AD-5N
VFP-62 Det 42-60	F8U-1P
HU-2 Det 42	HUP-2

Mediterranean
28 January to 31 August 1960

CVG-8	Tailcode: AJ
VF-102	F4D-1
VF-103	F8U-2
VA-83	A4D-2
VA-81	A4D-2
VA-85	AD-6
VAH-5	A3D-2
VAW-12 Det 42	AD-5W
VAW-33 Det 42	AD-5Q
VFP-62 Det 42	F8U-1P
HU-2 Det 42	HUP-2

Mediterranean
9 February to 25 August 1961

CVG-8	Tailcode: AJ
VF-102	F4D-1
VF-103	F8U-2
VA-83	A4D-2N
VA-81	A4D-2
VA-85	AD-6
VAH-5	A3D-2
VAW-12 Det 42	WF-2
VAW-33 Det 42	AD-5Q
VFP-62 Det 42	F8U-1P
HU-2 Det 42	HUP-3

Mediterranean
3 August 1962 to 2 March 1963

CVG-8	Tailcode: AJ
VF-74	F-4B
VF-103	F-8C
VA-83	A-4C
VA-81	A-4B
VA-85	A-1H
VAH-5	A-3B
VAW-12 Det 59	E-1B
VAW-33 Det 59	EA-1F
VFP-62 Det 59	RF-8A
HU-2 Det 59	UH-25C

Mediterranean
10 July 1964 to 13 March 1965

CVW-8	Tailcode: AJ
VF-74	F-8E
VA-83	A-4E
VA-81	A-4E
VMA-331	A-4E
VAH-6	A-3B
VAW-12 Det 59	E-1B
VAW-33 Det 59	EA-1F
VFP-62 Det 59	RF-8A
HU-2 Det 59	UH-2A

Mediterranean
24 August 1965 to 7 April 1966

CVW-8	Tailcode: AJ
VF-74	F-4B
VMF(AW)-451	F-8D
VA-83	A-4E
VA-81	A-4E
VA-112	A-4E
VAH-11	A-3B
VAW-12 Det 59	E-1B
VFP-62 Det 59	RF-8A
HU-2 Det 59	UH-2A/B

Vietnam
6 June to 14 September 1967

CVW-17	Tailcode: AA
VF-11	F-4B
VF-74	F-4B
VA-106	A-4E
VA-46	A-4E
VA-65	A-6A
RVAH-11	RA-5C
VAH-10 Det 59	KA-3B
VAW-123	E-2A
HC-2 Det 59	UH-2A

Mediterranean
22 July 1968 to 29 April 1969

CVW-17	Tailcode: AA
VF-11	F-4B
VF-74	F-4B
VA-34	A-4C
VA-15	A-4C
VA-152	A-4B
RVAH-12	RA-5C
VAH-10	KA-3B
VAW-123	E-2A
HC-2	UH-2A

Mediterranean
2 December 1969 to 8 July 1970

CVW-17	Tailcode: AA
VF-11	F-4B
VF-74	F-4B
VA-66	A-4C
VA-216	A-4E
VA-36	A-4C
RVAH-13	RA-5C
VAH-10 Det 59	KA-3B
VAW-126	E-2A
HS-11	SH-3D

Mediterranean
5 January to 2 July 1971

CVW-17	Tailcode: AA
VF-11	F-4B
VF-74	F-4B
VA-83	A-7E
VA-81	A-7E
VA-85	A-6A
RVAH-7	RA-5C
VMCJ-2	EA-6A
VAW-126	E-2B
HS-3	SH-3D

Mediterranean
22 September 1972 to 6 July 1973

CVW-17	Tailcode: AA
VF-11	F-4B
VMFA-531	F-4B
VA-83	A-7E
VA-81	A-7E
VA-85	A-6A, KA-6D
RVAH-9	RA-5C
VAQ-135 Det 2	EKA-3B
VAW-126	E-2B
HS-3	SH-3D

Mediterranean
11 March to 11 September 1974

CVW-17	Tailcode: AA
VF-11	F-4J
VF-74	F-4J
VA-83	A-7E
VA-81	A-7E
VA-85	A-6E, KA-6D
RVAH-6	RA-5C
VAW-126	E-2B
HS-3	SH-3D

Mediterranean
2 March to 22 September 1975

CVW-17	Tailcode: AA
VF-11	F-4J
VF-74	F-4J
VA-83	A-7E
VA-81	A-7E
VA-85	A-6E, KA-6D
RVAH-7	RA-5C
VAQ-134	EA-6B
VAW-111	E-2B
HS-3	SH-3D

Mediterranean
4 April to 6 October 1978

CVW-17	Tailcode: AA
VF-11	F-4J
VF-74	F-4J
VA-83	A-7E
VA-81	A-7E
VA-85	A-6E, KA-6D
VS-30	S-3A
VAQ-130	EA-6B
VAW-116	E-2B
HS-3	SH-3D

Mediterranean
27 November 1979 to 7 May 1980

CVW-17	Tailcode: AA
VF-11	F-4J
VF-74	F-4J
VA-81	A-7E
VA-83	A-7E
VA-85	A-6E, KA-6D
VS-30	S-3A
HS-3	SH-3H, D, A
VAW-125	E-2C
VAQ-133	EA-6B

Mediterranean
2 March to 15 September 1981

CVW-17	Tailcode: AA
VF-74	F-4J
VMFA-115	F-4J
VA-83	A-7E
VA-81	A-7E
VA-85	A-6E, KA-6D
VS-30	S-3A
VAQ-130	EA-6B
VAW-125	E-2C
HS-3	SH-3D

Mediterranean
8 June to 16 November 1982

CVW-17	Tailcode: AA
VF-74	F-4S
VF-103	F-4S
VA-83	A-7E
VA-81	A-7E
VA-85	A-6E, KA-6D
VS-30	S-3A
VAW-125	E-2C
VAQ-130	EA-6B
VR-24 Det A	C-2A
HS-3	SH-3H

Mediterranean
2 June to 10 November 1986

CVW-6	Tailcode: AE
VF-11	F-14A
VF-31	F-14A
VA-37	A-7E
VA-105	A-7E
VA-176	A-6E, KA-6D
VAW-122	E-2C
VS-28	S-3A
HS-15	SH-3H
VAQ-132	EA-6B
VQ-2 Det	EA-3B

Mediterranean
25 April to 7 October 1988

CVW-6	Tailcode: AE
VF-11	F-14A
VF-31	F-14A
VA-37	A-7E
VA-105	A-7E
VA-176	A-6E
VAW-122	E-2C
VS-28	S-3A
HS-15	SH-3H
VAQ-132	EA-6B

Mediterranean
4 November 1989 to 12 April 1990

CVW-6	Tailcode: AE
VF-11	F-14A
VF-31	F-14A
VA-37	A-7E
VA-105	A-7E
VA-176	A-6E, KA-6D
VAW-122	E-2C
VS-28	S-3A
HS-15	SH-3H
VAQ-132	EA-6B

Mediterranean
(Provide Comfort)
30 May 1991 to 21 December 1991

CVW-6	Tailcode: AE
VF-11	F-14A
VF-31	F-14A
VFA-132	FA-18A
VFA-137	FA-18A
VA-176	A-6E, KA-6D
VAW-122	E-2C
VS-28	S-3B
HS-15	SH-3H
VAQ-133	EA-6B

Solomon Islands The Isolation

By John M. Elliott

Japan's initial objective of acquiring the "Southern Resources Area," the Netherlands Indies and Malaya, was quickly achieved. The aggressive philosophy of Imperial Headquarters, bolstered by the succession of early victories, ordered a further advance. These additional gains overextended the Japanese capability of consolidating and strengthening the early conquests. This dissipation of resources, more than anything else, hastened the downfall of the Japanese Empire.

Part of this further expansion was to take Port Moresby in southeastern New Guinea and move into the Solomons. After the planned Battle of Midway, further expansion south was to occupy New Caledonia, Fiji and Samoa, cutting the lifeline between the United States and Australia. The field headquarters for this push against the U.S./Australia supply line was at Rabaul. Located on the eastern end of New Britain, with an excellent deep water harbor, it was a prize whose capture dominated the Allied planning. However, in 1942, Rabaul was far too ambitious an objective and one which could only be achieved by the gradual island-by-island approach. Because of the lack of carrier air support, each succeeding step had to be within the range of land-based fighter and light bomber aircraft. The terrain of the Solomon Islands is basically jungle and hills extremely difficult to traverse, which tended to localize land combat and put a premium on air and sea power. Guadalcanal, New Georgia and Bougainville had sizeable harbors and airfield sites which made them logical

Campaign of Rabaul

stopping points in a deliberate advance on Rabaul. Airfields established on these islands by the Japanese to assist in the attacks on Guadalcanal were of equal importance to the Allies in their northern advance.

With a toehold firmly established on Guadalcanal, the slow inexorable advance up the Solomon Island chain began towards the isolation of Rabaul. From the beginning of the war, the Japanese Mitsubishi A6M-2 *Zero* had been the nemesis of Allied airmen. Faster and more maneuverable than the Allied fighters, it had the drawback of light construction and lack of adequate armor protection for fuel, ammunition and oxygen supplies. The best technique in the beginning was to

CVEs Named After Sites in the Solomon Islands

CVE- 60 USS Guadalcanal
CVE- 67 USS Solomons
CVE- 72 USS Tulagi
CVE- 78 USS Savo Island
CVE- 88 USS Cape Esperance
CVE- 94 USS Lunga Point
CVE-100 USS Bougainville
CVE-104 USS Munda
CVE-108 USS Kula Golf
CVE-111 USS Vela Gulf
CVE-114 USS Rendova
CVE-115 USS Bairoka
CVE-119 USS Point Cruz
CVE-121 USS Rabaul

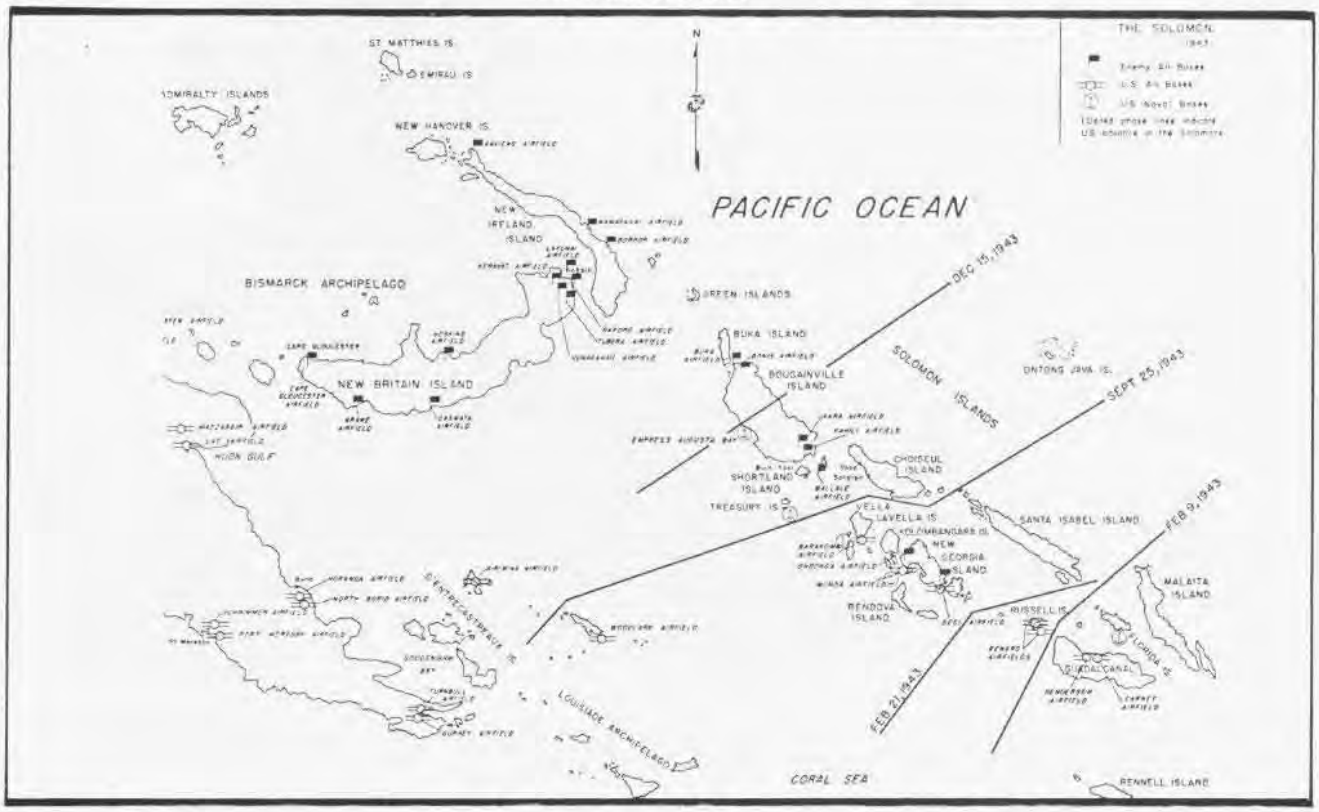
Marine torpedo bombers taxi up the line leading to the runway of the Bougainville airport, bound for the skies over the enemy's shipping lanes.

make a diving pass through the enemy formation and not try to engage in a dogfight with the more nimble aircraft. When guns could be brought to bear, the *Zero* was usually severely damaged. As tactics were improved with such innovations as the "Thatch Weave," the odds became better for the Allied aviators.

Conceived in 1938, the F4U *Corsair* was accepted by the Navy in 1941. This was the heaviest U.S. Navy fighter to date built around the largest engine available. While its "gull wing" made possible a short and rugged landing gear to withstand the rigors of carrier operations, its problems in landing kept it from being accepted for carrier use. Desperate for an advanced fighter aircraft, the Navy assigned the early production aircraft to the Marine

An Avenger undergoes maintenance under primitive field conditions.

Southwest Pacific



Corps to use from land bases. A field rework facility was established by ABG-2 at NAS North Island, Calif., to incorporate a number of modifications to eliminate some of the problems and make the *Corsair* combat ready.

Relief from tactical disadvantage came with the introduction of the F4U-1 *Corsair* to the Solomon skies by VMF-124 on 12 March 1943. Nicknamed "Whistling Death" by the Japanese because of the noise made by the air passing through the oil cooler and intercooler, the *Corsair* soon replaced the F4F *Wildcat* in all fighter squadrons. As the pilots learned the superior capabilities of the *Corsair*, and weaknesses of the *Zero*, the kill ratio began to climb so that at the end of the war it was estimated to be 11 to 1. Besides its survivability in combat, the *Corsair* had much greater range than the *Wildcat*, which permitted fighter sweeps against Japanese airfields as far north as Kahile and Buin on the southern end of Bougainville.

In November and December 1942, the Japanese built an airfield at Munda Point on New Georgia, the next large island north of Guadalcanal. This field was to bring their fighter aircraft within shorter striking range of the southern Solomons. While it was the Japanese hope for reentry into lower Solomons, it was the Allied hope for another step north towards Rabaul. The location, rather than any significant strategic advantage, made the Russell Islands the first objective after Guadalcanal was secure. When operational, the airfield at Banika moved Allied air some 60 miles closer to Rabaul. This applied pressure on the Japanese airfields on Rendova and Munda Point in the New Georgia group, which came under attack in June. Weeks of bitter fighting culminated in the conquest of the New Georgia group. This provided ComAirSols with airfields at Munda, Segi Point and Barakoma which advanced against Japanese-held positions in the northern Solomons.

Interception of Japanese messages told of a visit by Admiral Isoroku Yamamoto to Bougainville on 18 April 1943. Good as the *Corsair* was it didn't have the range to fly this mission, necessitating its being flown by U.S. Army Air Force P-38s. Flying low and skirting wide around the New Georgia chain to escape enemy radar, the formation arrived at the target site along with the admiral's flight. Several quick passes and both "Betty" bombers were shot down and crashed in the jungle. The loss of the planner for the Pearl Harbor raid, Battle of Midway and Commander in Chief of the Combined Fleet was a telling blow to the spirit of the Solomon Island defenders and a portent of things to come. In order not to reveal the fact that some Japanese codes were being read, news of the victory could not be released. Also, flights of P-38s were sent to the area on subsequent days to make it appear to have been a chance encounter and not a planned execution.

From the beginning of the war, Germany was seen as the major threat. The Allies made a decision to use the major portion of their assets in the victory over Germany and then turn their efforts against Japan. By mid-1943, there was a growing realization that the air and naval base at Rabaul might not have to be captured by force, but could be neutralized by aerial blockade as had been so effective against other bypassed strong points in the march north. The final decision to strangle Rabaul by air was made by the Combined Chiefs of Staff at the Quebec Conference in August 1943. The decision was also made to open a second offense through the central Pacific. The concept of Europe first meant that two campaigns would be fought in the Pacific with the troops and material available.

Bougainville, the largest and last island of the Solomon chain, was invaded on 1 November 1943. By the first week of January, strikes against Rabaul were being mounted from the fields in the Empress Augusta Bay area. While the exploits of the fighter pilots received the bulk of the air publicity, it was the relentless day-to-day attacks of the bombing community that made the advances of the ground troops possible. Large-scale fighter sweeps, which had been developed during the neutralization of Kahile and Buin, were designed to eliminate the air strength at Rabaul and keep it from attacking the troops fighting on Bougainville. In addition to those sorties, large-scale SBD and TBM strikes were made against the enemy airfields and supply installations in the Rabaul area. The heavy losses of Japanese aircraft during the early stages of the Bougainville campaign included many carrier-based aircraft sent from Truk to bolster the Rabaul air defenses. The loss of these carrier aircraft and crews was later felt during the forthcoming battles in the central Pacific.

From the first days at Guadalcanal, night raiding aircraft had been a problem for which there was little relief except antiaircraft guns and searchlights, with a few aircraft working with the lights. This problem had

Marine Corsair fighter planes taxi out from their revetments on the fighter strip on the Russell Islands in answer to a 'scramble' call to meet enemy planes coming down from Bougainville.

A Douglas SBD-5 of VMSB-341 flying from Green Island during the latter half of 1944.

been recognized and observers sent to England in 1941 to learn the equipment and tactics being used against night raiding German aircraft. However, there were no suitable aircraft in the U.S. for this mission. Twenty-four of the first F4Us were modified into night fighters with the designation F4U-2. These went to the Navy and had the normal six machine guns in the wing in addition to the radar antenna on the right wing. Marine aviation had to be satisfied with the Lockheed PV-1, equipped with airborne radar and six .50-caliber machine guns in the nose.

The "teething" problems of the *Corsair* applied to the F4U-2, as well, so that it was not until the Bougainville campaign that night-fighter aircraft were used in combat. With the rudimentary equipment and the early stage of training in working with the Ground Control Interception (GCI) radar installations, the results were all that could be expected. In addition, there was a reluctance of ground commanders to shut off the searchlights and cease firing the AA guns. VF(N)-75 shot down 4 enemy aircraft while VMF(N)-531, during a longer period, accounted for 12 in the months it was in combat. The Japanese quickly learned that it was not safe to risk their dwindling supply of aircraft in areas protected by the GCI/night-fighter teams, just as they had learned not to risk their ships in an area in which they did not possess air coverage.

Realizing that the battle for the Solomons was lost, the Japanese withdrew all remaining aircraft from Rabaul to Truk on 17 February 1944. Rabaul's fate was sealed, not by advancing forces in the Solomons but by the carrier air raids of TF 58 on 17 and 18 February against their bastion, Truk, in the Carolines. This strike was an attempt to catch the entire Combined Fleet in its lair after aerial reconnaissance by two Marine PB4Y-1s from VMD-254 had made the thousand-mile flight from the Solomons and photographed the installation. Seeing these long-range aircraft, the Japanese realized what was in store for them. The Combined Fleet and all aircraft were sent north to save them for another day. Rabaul, the once unattainable fortress, was left to die on the vine.

Just prior to the air evacuation of Rabaul, a landing was made at Green Island north of Bougainville. When the fighter and bomber strips became operational, it provided a base just 115 miles away from Rabaul from which constant strikes could be flown. It also sealed off the northern approach to the Solomon Sea placing the enemy forces to the south in an untenable position.

Any remaining hope of relief from the north was lost with the landings on Los Negro in the Admiralties and Emirau in the St. Matthias Group on 29 February and 20 March, respectively. Thus, the strong point of Kavieng on the northern tip of New Ireland was also bypassed and rendered impotent.

While the Solomon Island campaign came to a close, the area still had a purpose to fill as a massive staging area for troops and supplies for the further advance towards General MacArthur's objective, the capture of the Philippines.

A Second Marine Air Wing Corsair fighter splashes down after the Leathernecks captured this airfield on Munda during WW II.

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

Nov 30: A department of Aviation Medicine and Physiological Research was authorized at the Naval Air Material Center to study physiological factors related to the design of high-speed and high-altitude aircraft.

Dec 15: Observation Fighter Squadron (VOF) 1, first of three of its type brought into existence during WW II, was established at Atlantic City, N.J., with LCdr. W. F. Bringle in command.

Dec 17: Commander Aircraft, Solomons, joined in the air campaign to reduce the Japanese naval base at Rabaul with a fighter sweep of Navy, Marine Corps and New Zealand planes led by Marine Ace Maj. Gregory Boyington. Intensive follow-up attacks through February 1944 assisted in the establishment of encircling Allied bases. Rabaul remained under air attack until the war's end, the last strike being delivered by Marine Corps PBJs on 9 August 1945.

Dec 20: The Naval Air Training Command was established at Pensacola, Fla., to coordinate and direct, under the Chief of Naval Operations, all Naval Aviation training in the Primary, Intermediate and Operational training commands.

Dec 20: Two *Catalinas* of Patrol Squadron 43, at Attu, flew the first Navy photoreconnaissance and bombing mission over the Kuriles.

The initial use of aircraft rockets in WW II took place in this area with TBMs from Bougainville and SBDs at Green Island using 5-inch aircraft rockets against targets in the Rabaul and Bougainville areas.

An event with more potential though also occurred. On 27 September 1944, Special Task Air Group 1 arrived at Sterling Island, southwest of Bougainville, and Green Island with its Interstate TDR-1 assault drones. Pilots had flown these aircraft up from the Russell Islands. Then the manual controls were neutralized and a 1,000-pound general purpose bomb was hung under the fuselage. The aircraft were flown, under radio control from a following TBM, to targets in the Bougainville and Rabual area. Being guided by a television camera in the nose of the drone, the controller would dive the aircraft into the target – this at a time when few had even heard of television. While the results of these strikes were inconclusive, they did prompt Tokyo Rose, the Japanese propagandist, to broadcast stories about the American suicide pilots. Kamikaze strikes were yet to be conceived by the Japanese. After expending approximately 50 drones, the squadron returned to the United States. Little did any of us who watched these strange little airplanes skitter off the deck realize we were watching the granddaddy of the formidable cruise weapons of today.

As the boring days of "milk runs" to the bypassed Bougainville, Rabaul and Kavieng bastions passed, events elsewhere brought the return to the Philippines to a reality. In preparation for the landing on Luzon and the capture of Manila, General MacArthur requested Marine dive-bombers to scout the advance and protect the flanks of his attacking force. All six remaining SBD squadrons at Bougainville and Green Island were assigned this mission. Extensive training programs were established at Bougainville for the aviators, ground controllers and the Army staff they were to work with. While deployed on Luzon, these hours of training developed a close-knit working team which finally provided the air-ground close support function Marine aviation had striven for since the days in the jungles of Haiti and Nicaragua.

One feature of operations of the South Pacific Forces in the Solomons was the cooperation and lack of inter-service friction between all services. No one branch could claim a major portion of the success. This was particularly evident in the operation of Aircraft, Solomons, which first operated under rear admirals, then a major general of the Army and finally a major general of Marines.

The campaigns in the Solomons did not have the massive fleet and ground forces nor the grandeur of the later central Pacific campaigns. Yet, it was in these jungles that the lessons were learned in jungle fighting and amphibious operations that made later successes possible. ■

Before his retirement in 1990, Mr. Elliott was assistant historian in the Naval Aviation History Branch, Naval Historical Center.

Anniversaries

NAS Oceana, Va., celebrated its 50th anniversary 17 August.

VFA-195 celebrated its 50th anniversary in August. Originally commissioned Torpedo Squadron 19 at Los Alamitos, Calif., the squadron became Attack Squadron 20 home-ported at Moffett Field, Calif. It is currently a part of CVW-5 based at NAF Atsugi, Japan.

* **VA-75** celebrated 50 years of carrier aviation experience. It was established 20 July 1943 as VB-18 flying the Douglas SBD *Dauntless* dive-bomber.

Naval Air Weapons Station, China Lake, Calif., celebrates its 50th anniversary in November. First established as the Naval Ordnance Test Station, it became a key part of the Naval Air Warfare Center Weapons Division in 1992.

VMFA-323 celebrated its 50th anniversary 6 August. The squadron was formed 1 August 1943, at MCAS Cherry Point, N.C., as VMF-323 and flew the F-4U *Corsair*.

Norfolk-based aircraft carrier ***John F. Kennedy*** (CV 67) marked 25 years of naval service 7 September.

Rescues

A training helicopter of HT-8, Whiting Field, Fla., was operating two miles off the coast of Navarre, Fla., when a crew member spotted two people in the water below. The couple signaled the helo, whose crew reported the situation to Whiting Field which relayed the information to **HC-16**, the search and rescue squadron for the greater Pensacola area.

HC-16 informed the Coast Guard of the mission and then launched an SH-3 *Sea King* to the rescue site. When the search and rescue helicopter arrived, its rescue swimmer jumped from the helo and pulled the couple from the water. Their sailboat had overturned and they had been in the water for three hours. Both were wearing life preservers.

The couple, William Pearce, a retired Marine Corps helo pilot, and his wife, Gloria, suffered from mild hypothermia. Both were treated and released from Naval Hospital, Pensacola.

Before it left the area, the HC-16 helo dropped a smoke marker in the water to light the way for a Coast Guard cutter which later towed the sailboat to shore.

Members of **HSL-34 Det 1** and ***Biddle*** (CG 34) combined to execute a search and rescue in the shark-infested waters of the Caribbean Sea.

Biddle received a report that the vessel *Caribson*, with eight people on board, was sinking in rough seas 115 nautical miles away. *Biddle* raced to the site, while the crew of Det 1 prepared the aircraft and briefed for the mission. After an hour of searching the debris-laden seas for survivors, the SH-2F *Seasprite* crew sighted a raft with the help of a U.S. Customs jet circling overhead. After checking the waters for sharks, "Greenchecker 233" manuevered into a low hover to rescue two survivors in a raft. The Customs jet spotted an orange vest a mile away, where another survivor was hanging onto a piece of wood. The deployed swimmer hooked up the victim and hoisted him into the aircraft. The survivor had several cuts and bruises from fending off sharks for the past 18 hours but was otherwise uninjured.

As the aircraft flew back to the ship, the helo crew spotted another body floating in the water. They marked the spot with a smoke flare, returned to the ship to drop off the three survivors, and refuel and returned for the corpse.

Awards

HSL-42 received the FY-92 **Maintenance Excellence Award**. The award was presented to CO Cdr. John Furness.

VXE-6 received the 1992 **Rescue Aircrew of the Year**, which is awarded to the aircrew who achieved the most notable helicopter rescue operation during the preceding year.

Cdr. William S. Devey, Aviation Intermediate Maintenance Officer of *Enterprise* (CVN 65), received the 1993 **Captain Virgil Lemmon Award** for avia-

Members of a P-3 crew from VP-10, deployed to NS Roosevelt Roads, P.R., from NAS Brunswick, Me., helped rescue two civilians whose helicopter went down near the Dominican Republic. L to R (front row): AW1 Bob Aitchison, AE2 Chris Hunsinger, AWAN Jason Pollard, Lt. Rob Tamaro and AD1 Frank Jodoin. (Back row): AW2 Mickey Dent, AO3 Ron Sandlin, AT1 Tim Smith, Lt. Andrew Witherspoon and Lt. Mark Damisch, the plane commander. Not pictured are Lt. Randy Casement, Ltjg. Mike Brady and AW3 Todd Crockett.

tion maintenance excellence. This annual award recognizes the aviation officer who has made the most significant contribution in the aviation maintenance/logistics field.

AS1 (AW/PJ) Apolinario "Toots" Tunaya, AIMD North Island, Calif., was selected as the **Aviation Support Equipment Technician of the Year**. As leading petty officer of Support Equipment Division since August 1991, he was instrumental in the improvements within the division which ultimately supports every aircraft flight at North Island. He is a chief selectee.

AS1 (AW/PJ) Apolinario Tunaya

Lt. Janet S. Teets received the 1993 **Winifred Quick Collins Award for Inspirational Leadership, Woman Officer** for her leadership while serving as operations flight officer, TACAMO mission commander, and E-6A aircraft commander and instructor pilot for VQ-3.

AZCM V. Elaine Human received the 1993 **Winifred Quick Collins Award for Inspirational Leadership, Enlisted** for her performance in controlling all facets of maintenance at VAQ-33, NAS Key West, Fla. She increased mission capability and sortie rates, decreased maintenance downtime and improved maintenance crew morale.

Independence (CV 62) received the Secretary of the Navy FY-92 **Energy Conservation Award** in the large ship category.
More than 432,000 kw hours of electricity and 11,560 marine diesel fuel gallons were saved by the combined effort of the crew.

Special Records

Maj. Tony "Spike" Valentino, XO, VMFA-312, achieved his 4,000th flight hour 16 April off *Theodore Roosevelt* (CVN 71).

LCdr. Charles B. Carnes, XO, NAF/RAF Mildenhall, England, accumulated over 6,000 flight hours effective 30 March.

Cdr. F. A. Verhofstadt, CO, HSL-32, flew his 3,000th SH-2 *Seasprite* hour 2 June, while his XO, **LCdr. S. W. Wright**, recorded his 1,000th small deck landing aboard *Leyte Gulf* (CG 55) 21 May.

Nashville (LPD 13) reached a milestone of 35,000 mishap-free landings.

An FA-18 *Hornet* from VFA-87 landed on the flight deck of ***Theodore Roosevelt*** (CVN 71) completing 60,000 aircraft traps for the carrier.

LCdr. Dave "Rooter" Root, VF-154, logged his 3,000th hour and 718th trap in the F-14 *Tomcat* highlighting 13 years as a fighter radar intercept officer.

Cdr. Dave "Roy" Rogers, CO, VA-145 achieved his 1,000th carrier trap, aboard *Constellation* (CV 64). He currently has over 4,250 A-6 hours.

Cdr. James Symonds, XO, VA-165, recorded his 1,000th career trap, aboard *Nimitz* (CVN 68).

Records

Several units marked **safe flying time:**

Unit	Hours	Years
HC-16	55,000	9
HSL-42	60,000	7
HSL-44	45,000	5
PMRF, Barking Sands	43,200	22
VAQ-137	24,735	13
VF-31	23,000	7
VMFA-312	20,000	5
VP-26		31
VP-49	210,000	31
VS-31	93,400	23
VS-33	148,000	33
VXN-8	98,000	26

Scan Pattern

The Navy Flight Demonstration Squadron, **Blue Angels**, announced the selection of two demonstration pilots, one C-130 pilot and two support officers for the 1994 show season. The new tactical jet demonstration pilots will be Lt. David Kidwell and Capt. Ben Hancock.

100 sailors and Marines received enlisted warfare pins as Theodore Roosevelt (CVN 71) neared the end of its six-month Med deployment.

PH3 Todd Lackovitch

USMC. Lt. Kidwell is currently assigned to VA-34, NAS Oceana, Va., and Capt. Hancock is with VMA-13, NAS Willow Grove, Pa.

Lt. Richard Whelan will be the new supply officer. He is currently serving with Ship's Intermediate Maintenance Activity, Newport, R.I. The new maintenance officer, Lt. Mark Evans, is reporting from VFA-81, NAS Cecil Field, Fla.

A total of 16 officers are assigned to the *Blue Angels*. Each year two to three new tactical jet pilots and staff officers and a Marine Corps C-130 pilot are selected to relieve departing team members.

Sylvia A. Schmidt retired September 1993 as secretary to the Commander, Naval Air Systems Command (NavAirSysCom), after 39 years of federal employment, all with the Department of the Navy. She started her federal career on 6 July 1954 with the Bureau of Ships. In 1955, she transferred to the Aircraft Design Division of the Bureau of Aeronautics (BuAer). In 1959, when BuAer merged with the Bureau of Ordnance to form the Bureau of Naval Weapons, she became secretary to the Executive Director of Research, Development, Test & Evaluation. In 1966, when the Navy established systems commands to replace the bureaus, she accepted the position of secretary to the Vice Commander, NavAirSysCom. She has been the Commander's secretary since 1982. The current ComNavAirSysCom is VAdm. William C. Bowes. Sylvia resides in Virginia with her husband, son, and daughter.

PH3 E. Weber

Ensign Craig Major posed with President Bill Clinton on the quarterdeck during the presidential visit to Carl Vinson (CVN 70) 13 Aug. The president spoke to a crowd of sailors and civilians at NAS Alameda, Calif., outlining his proposals to transition from a military-dependent economy to a "thriving high-tech commercial hub to Asia and beyond."

President Bill Clinton signed legislation on 2 August 1993, establishing an extension for the Smithsonian's National Air and Space Museum near Dulles International Airport in Virginia. The 670,000-square-foot facility will provide the museum with adequate space to house and restore its collection of airplanes and spacecraft, many of which are too large for the museum on the National Mall in Washington, D.C. Among the objects to be displayed in the new extension buildings will be the space shuttle *Enterprise*; the *Enola Gay*; an SR-71, the world's fastest airplane; a Lockheed *Super Constellation* long-range airliner; a Boeing B-17 *Flying Fortress*; a Concorde; and Apollo capsules.

Secretary of the Navy John H. Dalton, left, with Lt. Dave Fluker, prepares to fly in HSL-41's newest SH-60B Block I helicopter.

Soon, **2nd Lt. Sarah M. Deal** may become the first female aviator to wear a Marine uniform. The 23-year-old from Perrysburg, Ohio, received approval 23 July to begin the process that could earn her aviator's wings.

VP-30 Jacksonville, Fla., merged with **VP-31**, Moffett Field, Calif., 9 September. The consolidation, a result of the military's downsizing, enables the Navy to train all of its P-3 *Orion* aircrews at Jacksonville eliminating the need to operate a training squadron on each coast. The squadron contains 769 people and 30 aircraft.

The *Sea Shadows* of **VQ-5 Det Alpha** returned to NAS Agana, Guam, 25 June 1993, from their first ever carrier deployment. The det, comprised of 33 enlisted personnel and 10 officers, left Guam 7 May for Yokosuka, Japan, and boarded *Independence* (CV 62). The carrier left port 11 May and the aircrew flew two ES-3A's aboard for carrier qualifications, marking the first Pacific Fleet operational carrier landing of the ES-3A.

An ES-3A lands aboard Independence.

JO1(SW) Eric S. Sesit

Three commanders from Naval Air Systems Command with more than 110 years of combined service between them, retired 6 August in a ceremony at Arlington, Va. All three enlisted in the Navy and worked their way up through the ranks to warrant officer before becoming Aircraft Maintenance Officers in the Limited Duty Officer program. Shown here with RAdm. Donald V. Boecker, Vice Commander NavAirSysCom, are: L to R, Cdr. John F. Pfuhl, Cdr. Norman G. Eiben, Radm. Boecker and Cdr. Richard C. Delong.

Flag Moves

RAdm. (LH) William B. Hayden, from Director for Operations and Plans, Commander in Chief, U.S. Atlantic Fleet, to Chief, Naval Air Training, Jul 93.

RAdm. David R. Morris, from Deputy and Chief of Staff, Commander in Chief, U.S. Atlantic Fleet, to Deputy Commander in Chief, U.S. Forces, Europe, Jul 93.

RAdm. (Sel) Daniel T. Oliver, from Commander, Fleet Air Mediterranean/Commander, Maritime Air Forces, Mediterranean, to Director, Assessment Division, N81, OPNAV, Aug 93.

RAdm. (LH) John R. Ryan, from Director for Logistics and Security Assistance, J-4, USCINCPAC, to Commander, Patrol Wings, U.S. Pacific Fleet, Aug 93.

RAdm. Robert J. Spane, from Director, Manpower and Training Branch, N889, to appointment to the grade of Vice Admiral and assignment as Commander, Naval Air Force, U.S. Pacific Fleet, Aug 93.

Change of Command

CVW-9: Capt. Timothy J. Keating relieved Capt. James A. Robb, 26 Jul.

CVW-17: Capt. Philip G. Howard relieved Capt. George M. Crim, 27 Aug.

FACSFAC Jacksonville: Capt. Kenneth A. Richardson relieved Capt. Morris M. Kemple, 21 Jul.

HMA-775: Maj. Paul F. Souza relieved Lt. Col. Rick M. Husty, 10 Jul.

HS-10: Cdr. Michael T. Fugua relieved Cdr. Donald F. Steuer, 15 Jul.

HSL-44: Cdr. Kenneth D. Beeks relieved Cdr. David R. Lopez, 3 Aug.

HelTacWingPac: Established and Capt. James F. Mader became first commander, 21 Jul.

Kennedy: Capt. J. R. Hutchinson relieved Capt. Timothy R. Beard, 24 Jun.

Kitty Hawk: Capt. William W. Pickavance, Jr., relieved Capt. James I. Maslowski, 2 Jul.

MALS-16: Lt. Col. Bonnie J. Robison relieved Lt. Col. Walter E. Lehner, 16 Jul.

MAWSPAC: LCdr. Jerry L. McWithey relieved Cdr. D. Alan Kuntz, 6 Aug.

MTACS-28: Lt. Col. Lawrence Carino relieved Lt. Col. Charlie Triplett, 24 Jun.

NADep North Island: Capt. Bob Neel relieved Capt. Charlie Sapp, 2 Jul.

NAS Jacksonville: Capt. Roy D. Resavage relieved Capt. Charles R. Cramer, 20 Aug.

NAS Whiting Field: Capt. Ludvig K. Tande relieved Capt. James E. Eckart, 30 Jul.

NAS Willow Grove: Capt. Eric L. Lekberg relieved Capt. Ned A. Broyles, 17 Jul.

NATTC Millington: Capt. Barry J. Coyle relieved Capt. Joseph W. Park, Jr., 6 Aug.

TraWing-6: Capt. Michael C. Vogt

VF-1: Cdr. Donnie L. Cochran relieved Cdr. David L. Bernhard, 2 Jul.

VF-33: Cdr. Steven C. Schlientz relieved Cdr. Anthony R. Reade, 8 Jul.

VFA-82: Cdr. Mark M. Benson relieved Cdr. Louis Childress, 3 Aug.

VFA-113: Cdr. Mark Emerson relieved Cdr. Stephen Jasper, 16 Jul.

VMFA(AW)-121: Lt. Col. Donald J. Borje relieved Lt. Col. Michael R. Humberd, 30 Jul.

VMA-231: Lt. Col. Bron N. Madrigan relieved Lt. Col. Donald E. Fleming, 9 Jul.

VMF-451: Lt. Col. David R. Dean relieved Lt. Col. Eddie A. Danniels III, 15 Jul.

VMFAT-101: Lt. Col. Ronald Richards relieved Lt. Col. Daniel A. Driscoll, Jr., 9 Jul.

VP-5: Cdr. Altman L. Lawson relieved Cdr. Lawrence S. Cotton, 9 Jul.

VP-11: Cdr. Anthony L. Winns relieved Cdr. Alex S. Hill, 24 Jul.

VP-17: Cdr. George G. Brown, Jr., relieved Cdr. James J. O'Rourke, 14 Jul.

VP-60: Cdr. Brian P. Burghgrave relieved Cdr. Jerome D. Kulenkamp, 7 Aug.

VP-30: Capt. Paul M. Griffin relieved Capt. Ernest L. Morris, Jr., 9 Sept.

VP-62: Cdr. Barry A. LaVigne relieved Cdr. Jan S. Milligan, 16 Jul.

VR-46: Cdr. Dave Franchella relieved Capt. (Sel) Len Goreham, 24 Jul.

VQ-5: Cdr. Patrick S. Collins relieved Cdr. Angelo J. Spadaro, 15 Apr.

VT-6: Cdr. Joe B. Gheesling relieved Cdr. James A. Mallory, 2 Aug.

VT-23: Cdr. Christopher D. Quinn relieved Cdr. Stephen J. Himes, 25 Jun.

VT-86: Cdr. Scott T. Johnson relieved Lt. Col. Robert Braithwaite, 20 Aug.

By Cdr. Peter Mersky, USNR

Polmar, Norman. *The Naval Institute Guide to the Ships and Aircraft of the U.S. Fleet, Fifteenth Edition.* U.S. Naval Institute, Annapolis, MD 21402. 1993. 639 pp. Ill. $56.95.

As always, this heavily researched, lucidly written volume has a wealth of information, especially in these unstable times. If you want *one* book to explain Navy and Marine Corps equipment, current operations and policy, it has to be this one.

Ships and Aircraft's format has changed somewhat, but the book is still quite large. Photographs are shown to great advantage and details, particularly of ships, are well displayed. I doubt, though, that we need two pages, including a full-page photo, on the 1797 frigate *Constitution*, no matter how evocative and symbolic she may be.

The chapters on carriers, Naval Aviation, aircraft and weapons systems are of primary interest. In this first edition since the Persian Gulf War, a lot of the peripheral text addresses the war against Iraq and how Naval Aviation as a whole responded and performed during that "short, violent conflict." Successes and failures are duly noted; at times, this book serves as a quick account of the Navy and Marine Corps in Desert Storm.

There are the inevitable typos and problems that creep into such a large work as this, some of which I suspect are the result of deadlines and changing numbers. Squadrons and aircraft types are occasionally misnoted, such as in the photo on page 19, which shows FA-18s and one *Intruder* refueling from a USAF KC-135. The A-6 is actually a KA-6D not an A-6E, and the *Hornets* are from VFA-81 – hence their 400-series side numbers – not VFA-83.

The photo caption on page 462 says that the battleship *New Jersey* served in the gulf. Fortunately, this mistake is not repeated elsewhere. In truth, the two battleships that pounded the Iraqis were *Missouri* and *Wisconsin*.

In large part, however, this edition is probably the most important of this book, certainly in the last 10 years. Its detail should be sufficient while the world and our Navy and Marine Corps struggle to sort themselves out.

ANA Bimonthly Photo Competition

PH3 Jeffery Bush of the Atlantic Fleet Imaging Command won the bimonthly ANA Photo Contest with this shot of an A-4F of VFC-12, 20 August 1993 entitled, "Last Flight of Super Fox."

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

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

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.**

Joint Aerial Refueling

The front cover of your Sep-Oct 93 issue had an Air Force HC-130 refueling Marine Corps RH-53Ds. Being a Marine KC-130 pilot, I took offense to the usage of an Air Force aircraft in a Naval Aviation publication – especially when there are six Marine Corps KC-130 squadrons whose primary mission is aerial refueling. Also, my squadron, VMGR-152, has in the past two years received the CNO Safety Award, the National Defense Transportation Association Award, and the Commandant's Aviation Efficiency Trophy for the second consecutive year.

I am disappointed that the effort and hard work of my Marines is upstaged and unrecognized in a publication that is distributed throughout this squadron.

Capt. William J. Becker
VMGR-152 Unit 37220
FPO AP 96603-7220

Ed's note: I appreciate your feelings. However, under proposed downsizing plans and the redefinition of the Navy's air power role – as outlined in the new naval strategy "...From the Sea" – economies will accrue in joint operations and procurement, the wave of the future. The AFX and JPATS are joint with the Air Force, and the Navy has drafted a joint requirement with the Air Force for the next-generation Sidewinder, the AIM-9X. Regarding recognition of your squadron, your CNO Safety Award appeared in Sep-Oct 93, p. 31, and the Commandant's Aviation Efficiency Trophy in Jan-Feb 93, p. 36. Additionally, in the aforementioned cover photo, "your Marines" are well represented by three H-53 helicopters. Like all publications, we are only as good as our sources. We did not receive notification from your squadron on the Defense Transportation Association Award. We strongly encourage input from all squadron public affairs offices.

R60-1 Constitution

As a young boy not quite five years old, I had the good fortune to see my first air show at Logan Airport in Boston, Mass., during June 1949. There, I saw a giant airplane, the R60-1 *Constitution*, along with a section of midshipman on the first air cruise of the Naval Academy.

Now, as a free-lance aviation research writer, I am attempting to trace down the operational life of two Lockheed transports (BuNos 85163 and 85164) that the Naval Air Transport Service flew during the late forties and early fifties until their retirement. I received information from the Naval Academy showing the cities of the second air cruise of 1949. I wish to know more about other air cruises and information on transpac flights to Hawaii. When completed, the article will be published in the *Journal of the American Aviation Historical Society*.

Frank Powers
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Unmanned Aerial Vehicles

I wish to correct a mistake in "VC-6 Launches UAV from LPD," (*NANews*, Jul-Aug 93, p. 5). The article incorrectly states that VC-6, Det 2, made history on 26 Apr 93 with the first launch of a *Pioneer* UAV from an amphibious vessel. As XO of the Marine Corps' 1st Remotely Piloted Vehicle (RPV) Company from 1987 to 1991, we accomplished *Pioneer* UAV launches from amphibious vessels on three occasions prior to that date: 1 Feb 89, RATO (rocket-assisted take-off)-launched a *Pioneer* from *Ogden* (LPD 5) during Kernel Blitz 89; 13 Sep 89, RATO-launched a *Pioneer* from *New Orleans* (LPH 11); 19 May 90, RATO-launched a *Pioneer* from *Mount Vernon* (LSD 39) and recovered aboard *Tarawa* (LHA 1) during RIMPAC 90.

I am uncertain whether these three instances were the **first** *Pioneer* UAV launches from amphibious vessels, but they were definitely *before* 26 Apr 93. Bravo Zulu to VC-6 for incorporationg *Pioneers* on the amphibs to keep a UAV capability afloat with the retirement of the battleships. UAVs did contribute significantly during the Gulf War. 1st RPV Company logged 232 flight hours during Desert Storm.

Maj. R. M. Rayfield
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Correction

Jul-Aug 93, "Year in Review," p. 17 – Under 22 Oct:

Space shuttle Columbia crew member Capt. Michael Baker is a Naval Aviator and was pilot of the 10-day mission.

Reunions, Conferences, etc.

Navy V-12 (USN/USMC) reunion, NOV 3-7, Norfolk, VA. POC: Capt. Bob Jones, USN (Ret.), 7623 Huntmaster Ln., McLean, VA 22102, 703-734-8510.

Tarawa (CV/CVA/CVS 40) reunion, NOV 4-7, Ocala, FL. POC: Joe DeNeve, 705 Forrest Dr., Bartow, FL 33830, 704-322-5445.

VMFA-312 50th Year reunion, NOV 5-7, Hilton Head Island, SC. POC: Julie Damm, VMFA-312, POB 66122, MCAS Beaufort, SC 29904-6122, 803-522-4454.

The Vietnam Veterans Memorial Run & Walk with Friends, NOV 7, 0900, Washington, DC. POC: Gerard Stegmaier, 2030 Clarendon Blvd., Suite 412, Arlington, VA 22201, 703-525-1107. This year's walk & run salutes women Vietnam vets and honors the dedication of the Vietnam Womens Memorial. It is recommended that individual walkers set a sponsorship goal of $100. Funds raised from the walk-a-thon will go to the Friends of the Vietnam Veterans Memorial, a nonprofit, nonpolitical organization dedicated to ensuring that its historical significance is not lost to future generations.

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