



"THAT OTHERS MAY LIVE"

Through 45 years of service, VC-8 crews saved over seven hundred lives in the Search and Rescue (SAR) Role, including some of the most challenging and newsworthy recoveries in the history of rotary wing aviation. In 2002, the capstone was placed on this remarkable achievement when the unit received the Chief of Naval Operations' SAR Model Manager's Unit Excellence Award. The proud counterpart to the combat training mission of VC-8 has been the squadron's dedication to the SAR motto: "THAT OTHERS MAY LIVE..."

Sep 1961: VC-8 rescued pilot of a Puerto Rican Air National Guard F-86 after he ejected into the ocean north of San Juan.

Jan 1962: VC-8 helo rescues two civilians from a swamp near San Juan Intl. after their light aircraft crashed.

Apr 1965: VC-8 saves two lives during early morning rescue of Air Force crash survivors.

Aug 1964: Crews of Salt Spray 15 & 16 rescue survivors after Army Caribou 4151 ditches at sea.

May 1970: VC-8 Sea King crew rescued 26 survivors at one time from a DC-9 airliner that crashed off ST Croix.

Dec 1986: VC-8 Helicopters rescue 75 people from certain death during the Dupont Hotel Fire in San Juan.

Sep 1988: VC-8 SAR crew rescue 4 individuals from a fifty-five foot boat which had capsized in twenty-foot seas during Hurricane Gilbert.

Jan 1989: In response to an urgent call from the Coast Guard, VC-8 launched an H-3 to a fishing vessel 50 miles out at sea in order to medevac a victim with 82% of his body burned from a fire on board the vessel.

Apr 1995: VC-8 Helicopter medevacs a partially paralyzed paratrooper from a night landing zone.

Sep 1996: During Hurricane Hortense, VC-8 Helicopter rescues 5 passengers from a capsized 70 foot trawler.

May 1997: VC-8 joined the efforts of several agencies to control the forest fire in the 10,500-acre nature reserve of "Monte del Estado" of Maricao. The first aerial firefighting by Navy helicopters in Puerto Rico.

1997: VC-8 flies over 12,000 pounds of medicine and food to Volcano victims in Montserrat. The Redtails also aided the British Red Cross on the island of Montserrat by ferrying 24,000 lbs of much needed food and medical supplies to the populace after the island's volcano erupted and closed down the only airport.

1998: Hurricane Georges hits Puerto Rico and the USVI. VC-8 helos fly over 140 hours providing damage assessment, recovery, and humanitarian assistance services. VC-8 Flies over 4,000 gallons of drinking water to isolated towns, and delivers generator and repair teams to several isolated hospital sites around Puerto Rico.

Nov 1998: VC-8 helicopter rescues one survivor of a civilian '72 Catamaran which had caught on fire.

Dec 1998: Civilian Boat with 48 persons capsizes in water. One survivor is rescued after treading water for 24 hours.

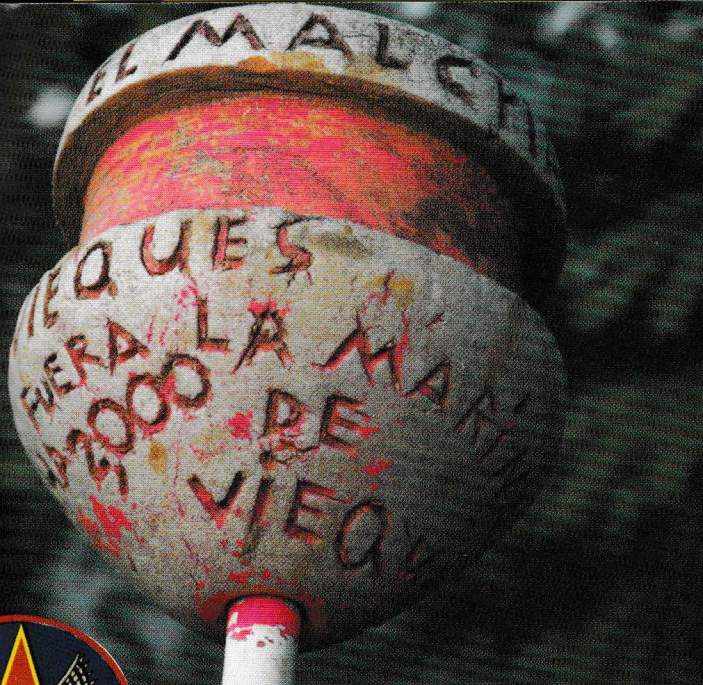
July 2001: VC-8 rescues 9 people from a boat that ran ashore southwest of St Thomas.

August 2001: VC-8 rescues a civilian with a critical head injury from the Natural Rock Slide in the Fajardo River.

November 2001: VC-8 rescues 2 civilians at night in heavy seas near Culebra.

February 2002: VC-8 rescues 4 civilians from a sinking boat in heavy seas 130 miles South of Saint Croix.

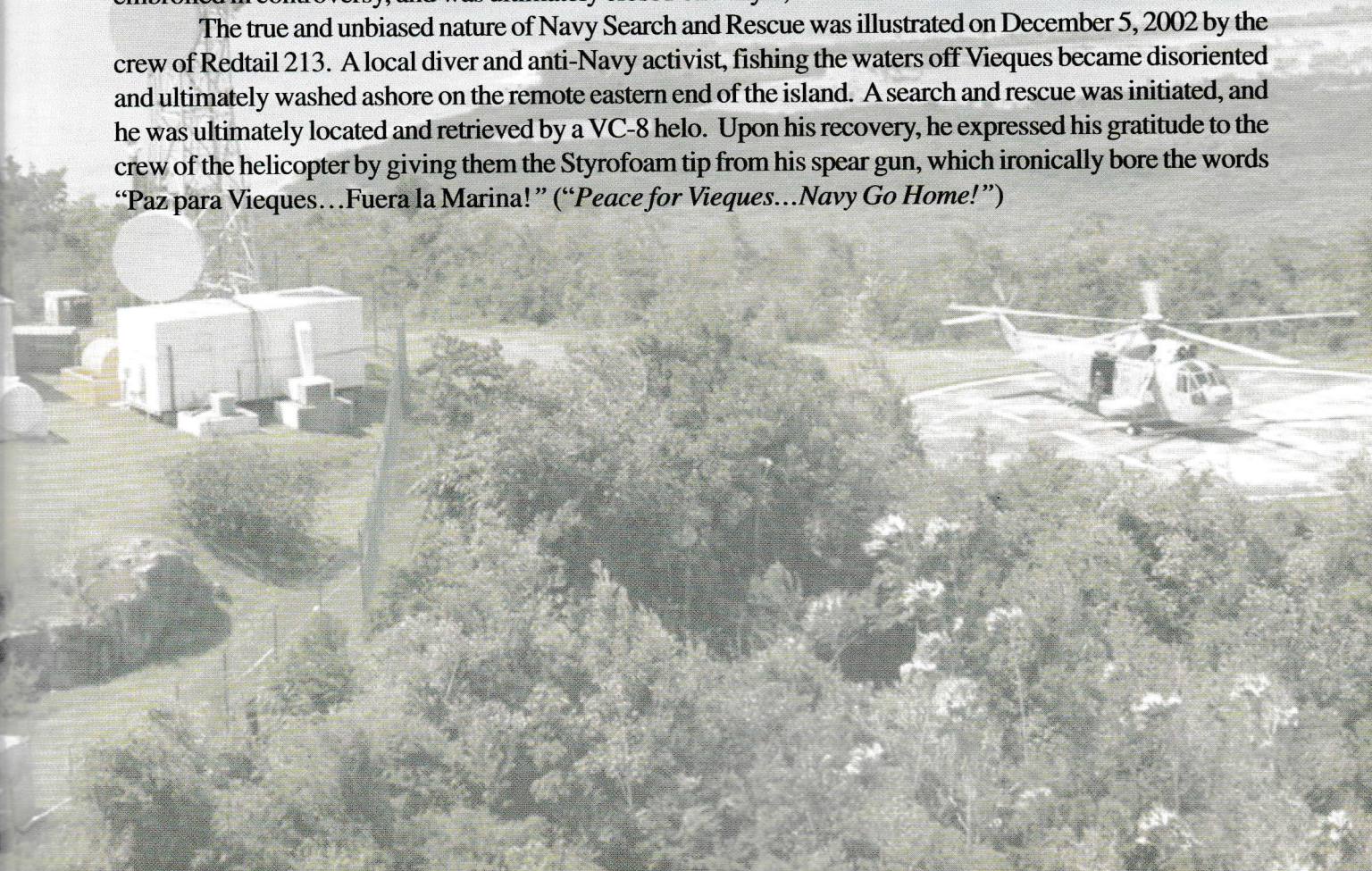
May 2002: VC-8 performs an aerial extraction and medevac for a military member who broke his leg in El Yunque Rain Forest.

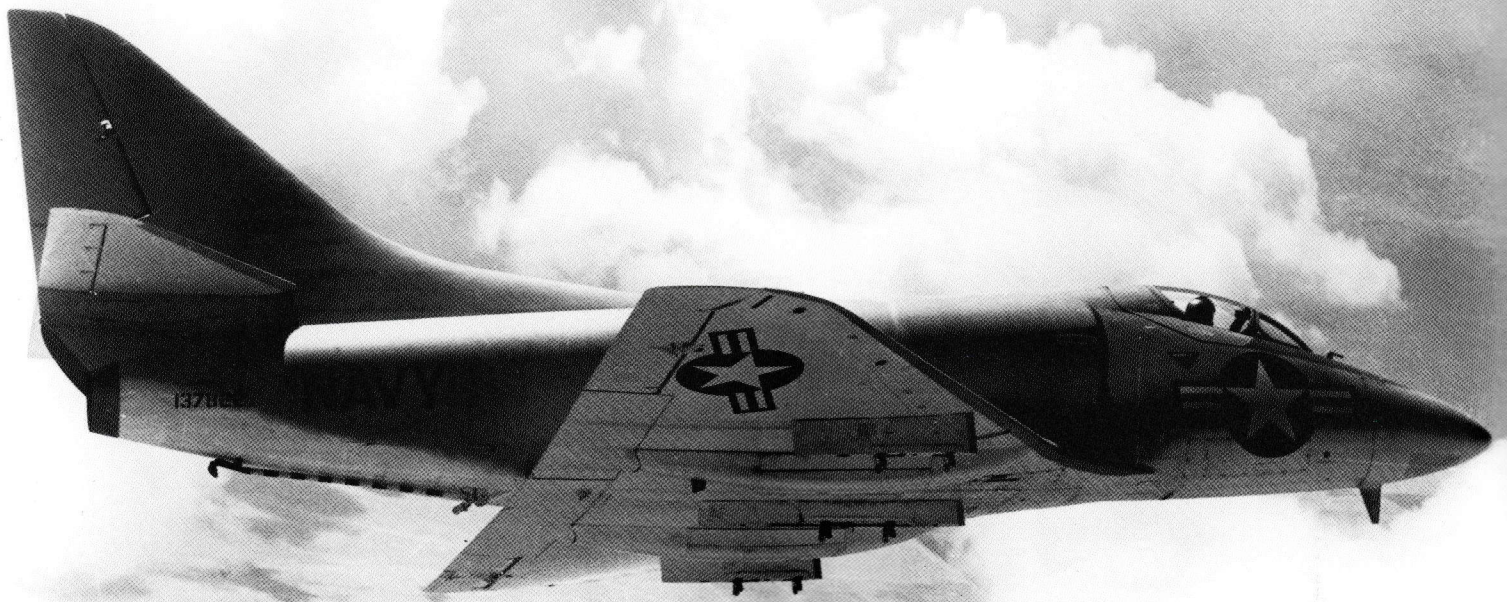


"PAZ PARA VIEQUES"

For almost sixty years, the name "Vieques" was synonymous with fleet training in Roosevelt Roads. The island, with its target ranges and storage magazines, played a key role in the training of all battle groups and provided a stopping point on their way to deployment. Vieques was the only target complex in the Atlantic Ocean at which the training of Submarines, Naval Gunfire, Amphibious Landings, Special Warfare and Boat Operations, and Airborne Close Air Support could be practiced...all at once! The island range became embroiled in controversy, and was ultimately closed on May 1, 2003.

The true and unbiased nature of Navy Search and Rescue was illustrated on December 5, 2002 by the crew of Redtail 213. A local diver and anti-Navy activist, fishing the waters off Vieques became disoriented and ultimately washed ashore on the remote eastern end of the island. A search and rescue was initiated, and he was ultimately located and retrieved by a VC-8 helo. Upon his recovery, he expressed his gratitude to the crew of the helicopter by giving them the Styrofoam tip from his spear gun, which ironically bore the words "Paz para Vieques...Fuera la Marina!" ("Peace for Vieques...Navy Go Home!")

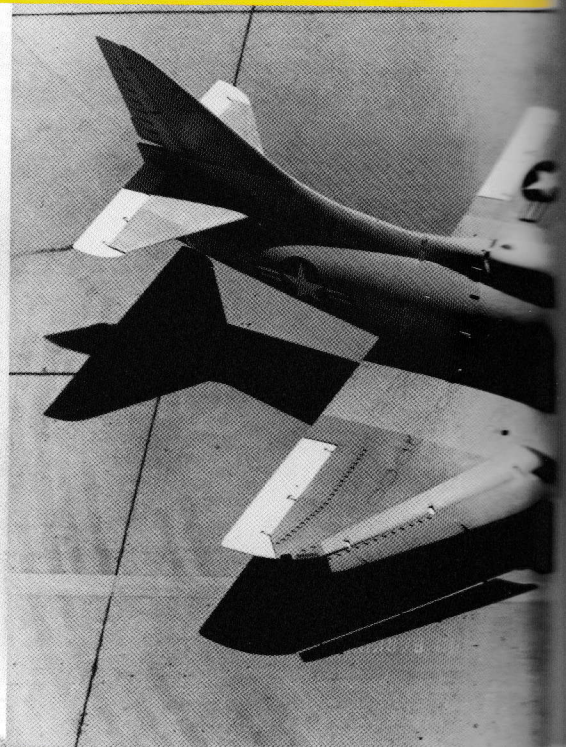
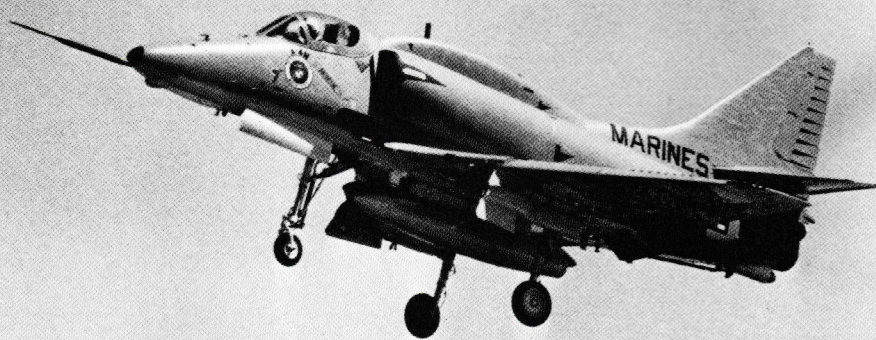




In this, the 100th year of powered flight, it is truly astounding to realize that one aircraft has been in active service to the Navy for *half* that time. That any aircraft could survive five decades of changes in technology and warfare, yet still remain relevant, is a monumental testimony to the man who conceived it, the people who built it, and the professionals who maintained it. In the hangar of history, several aircraft stand out as significant: The Douglas A-4 Skyhawk stands out as a *legend*.

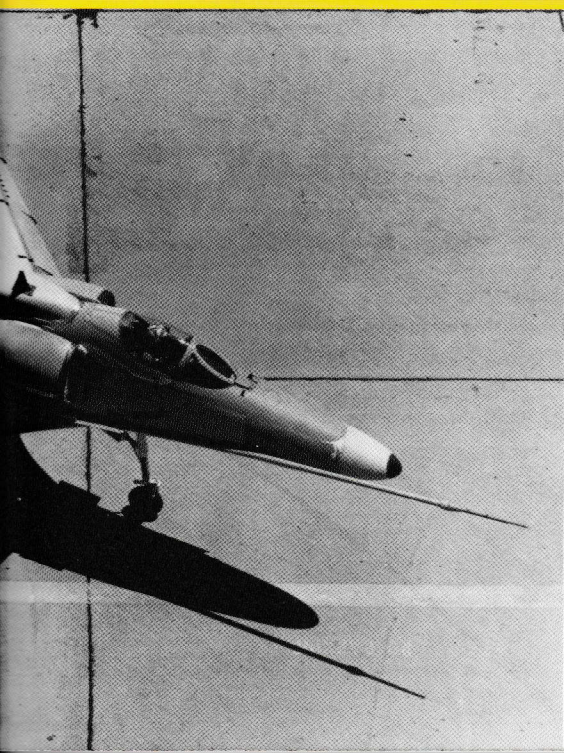


THE HISTORY OF





THE A-4 SKYHAWK





DOUGLAS

Founded in 1920 with the financial backing of David R. Davis, "Davis-Douglas" had already established a strong reputation in the aviation industry well prior to World War II. With a shift in financing, Davis' name was dropped from the ledger and the corporation focused its efforts on pursuing Navy contracts. During World War II, Douglas' main production facility at El Segundo, California became one of the main engines of the war effort, producing the first monoplane torpedo bombers for the Navy and ultimately the mainstays of the carrier-based attack fleet, the TBD Devastator and SBD Dauntless.

At war's end, Douglas' production and design capability had evolved to become one of the most dominant manufacturers in the industry. Many of the company's most innovative designs for the war did not see widespread service until the war had ended. Examples of these 'late bloomers' which achieved such distinction at the dawn of the Cold War included the A-1 Skyraider, A-20 Havoc, and A-26 Invader.

THE ATOMIC MISSION SHIFTS TO CAS

When the Navy first contemplated a nuclear strike role, the first weapons were so prohibitively large they dictated aircraft of a size that no carrier could handle. The first operational devices weighed some 10,000 pounds and measured 11 feet in length. Eager to compete with the newly formed Air Force in the nuclear role, the Navy focused much of its resources on developing a suitable platform. Some senior politicians, along with Air Force General Curtis LeMay, sought to capitalize on the "Atomic Dilemma" as a justification for doing away with Carrier Aviation altogether. This dispute was overcome by events as the onset of the Korean War validated the need for a carrier-based striking force capable of providing Close Air Support (CAS) and Interdiction using conventional weapons. The Douglas AD-1 Skyraider became the primary platform for the mission.

By the time of MacArthur's Inchon landing, 41% of USN/USMC sorties were Tac Air, CAS, and Interdiction. Unfortunately, USN fleet Skyraider pilots complained of their slow speed compared to the Panther, Cougar, and Banshee fighter jets that were their escorts. The faster jets, however, lacked the weapons load and endurance to accomplish the CAS mission. At the same time, the inter-service rivalry continued as the USAF developed the B-47 and B-52. The Navy Required a CAS platform which could: 1) deliver nuclear weapons, 2) operate at turbojet speeds, and 3) carry a heavy conventional payload.

THE SPEC

As carrier based turbojets increased in performance, so had their complexity, size, and weight. This alarming trend became the subject of a meeting in January 1952 between Ed Heinemann, fellow Douglas exec Robert Canady, and RADM Apollo Soucek. At that meeting, Ed presented an unsolicited outline of a new lightweight fighter aircraft. RADM Soucek indicated the Navy was not interested in a new jet fighter because the F-8 Crusader was under development at that time. As a substitute, RADM Soucek asked Ed to apply the design to a new jet-powered *attack* aircraft capable of delivering a 2,000-pound weapon over a 400nm radius while remaining within a 30,000-pound weight limit. The Navy was considering a turboprop replacement for the AD series aircraft to fill this role, but engine control problems plagued the program.

Ed Heinemann, in answer to the Navy's challenge set out to "take the best engine I could get, stick a wing under it, a saddle on top for the jockey, and leave out the rest." That concept became the A-4 Skyhawk. Within weeks, Ed returned to DC with a proposal exceeding RADM Soucek's criteria. The new design boasted a top speed of 600 knots, and was capable of delivering a 5,000 pound bomb over a range of 460 nm...at an operational weight less than half the specified limit! By demanding simplicity in every aspect of the design, and optimizing its performance *only* for efficiency at high subsonic cruise, Heinemann delivered a jet weighing only 8,400 pounds. Not bad for a jet conceived on a cocktail napkin.

On June 21, 1952, the Navy awarded a contract to Douglas Aircraft Company for design and construction of one XA4D-1 and one static test airframe. The Navy specifications for the contract were for a "Light weight, single engine, single place, high performance, carrier based, day attack plane capable of performing dive bombing, interdiction and CAS". Further, it had to be "capable of delivering both conventional or special weapons and attacking sea and land targets with or without fighter escort where control of the air had not been established". These specifications had to be met with a maximum price of \$1 million per aircraft. The "Scooter" was born.



On June 22, 1954, the XA4D-1 (buno 137812) flew for the first time piloted by Douglas test pilot Bob Rahn. Two years of extensive testing followed, highlighted by the first trap aboard the USS TICONDEROGA (CV-14) in September 1955. Throughout the test series, the aircraft astonished both observers and pilots alike. The aircraft was a pilot's fantasy, featuring a stunning roll-rate of 720 degrees-per-second, excellent maneuvering characteristics, and clean aerodynamic lines that gave it record-breaking performance. During the test series, the A-4 became the first attack aircraft to hold the world 500 km closed-course record with a speed of 695.163 mph.

Following testing, the first Skyhawks (designated the A-4A) were delivered to VA-72 in October 1956. Thus began what would become a record-breaking 24-year production run for the Skyhawk, a legacy that would continue until the last A-4M rolled off the assembly line at Palmdale on February 27, 1979. In all, 2960 airframes were delivered to Navy, Marine Corps, and international squadrons.

Due primarily to the simplicity of its design, the A-4 has proven to be an extremely versatile aircraft fulfilling numerous roles in times of both war and peace. Operationally, the first Scooters to see action were assigned to VA-83 covering the Marine landing near Beirut in the summer of 1958. On August 5, 1964, the A-4 was first employed in the skies over Vietnam as part of operation "Pierce Arrow". Over nearly the nearly eight years of conflict, the A-4 served primarily in attack missions, carrying iron bombs and AGM-12 Bullpup air-to-surface missiles. At other times, Scooters were used for air defense suppression when armed with the AGM-45 Shrike missile, or as tankers when equipped with buddy stores. In one case, an A-4 was credited with a MIG kill when LCDR Theodore R. Swartz of VA-76 downed a North Vietnamese aircraft on May Day, 1967. Astonishingly, Swartz's weapon of choice was an unguided, air-to-ground Zuni rocket. Though LCDR Swartz's victory—the first Air-to-Air kill in the history of the Skyhawk—was an impromptu event, A-4s were on occasion formally assigned Air-to-Air missions, including High Value Unit Combat Air Patrol for antisubmarine aircraft in the gulf of Tonkin. However, the mainstay of the A-4's combat missions, and those for which the aircraft became famous were Close Air Support for the Army and Marine Corps.

The A-4 served 112 combat cruises, more than any other aircraft to date. Between August 1964 and January 1973, 266 A-4s were lost in support of the War in Vietnam. Though combat losses were substantial in number, they were low in proportion to the sheer volume of sorties flown (0.002 cumulative combat losses per sortie). In addition to the Close Air Support role, Skyhawks were employed in some of the most significant planned-strikes during the conflict, including the Gulf of Tonkin, *Thanh Hoa* Bridge, *Kep Mig* airfield, and the defense of *Khe Sanh*.

After being retired from U.S. front line forces, the Skyhawk performed other vital roles for the Navy with equal success. During the mid 70's, many of the A-4C/E/F's were transferred to Fleet Composite Squadrons for use in the adversary role. One of the first squadrons to fly the A-4 was the Navy's Fighter Weapons School (Top Gun) where many a fighter pilot found himself outmaneuvered by the "Bantam Bomber." In 1973, the Navy's Blue Angels flight demonstration team traded in their F-4 Phantoms for the more nimble Skyhawk. The Blues' customized version featured the up-rated P-408 Engine which despite its lack of afterburner gave the aircraft a thrust-to-weight ratio near one-to-one. One additional feature was added that Ed Heinemann refused to allow in the original design: a built-in boarding ladder. This feature made the jets the envy of every other Scooter Driver who had to shimmy down the refueling probe to reach the ground. In total, 17 different variants of the A-4 have served numerous units bearing the designations VA, VMA, VF, VC, VMAT, VMT, VT, VSF, VAQ, VX, RVAH, NWTS, and TPS. Beyond the United States, the A-4 has served in the air forces of Brazil, New Zealand, Singapore, Australia, Indonesia, Israel, Kuwait, and Argentina, including combat action in the last three.

In June 1969, the A-4 began its final assignment: that of Advanced Strike Trainer for Student Naval Aviators. Since the first TA-4J introduction to the Training Command, the Skyhawk accumulated over 2,011,100 flight hours and flew some 1,638,100 sorties. Additionally, the TA-4J logged more than 71,100 shipboard arrested landings, helping thousands of fledging Student Naval Aviators earn their right to claim the title "Tail Hooker." In all, more than 11,370 pilots and 5,080 Naval Flight Officers received their wings of gold after training in the Scooter.

Skyhawks have served with Fleet Composite Squadron EIGHT for 36 years, beginning with the A-4C, graduating to the TA-4J, and ultimately a mix of modified TA-4F's and J's incorporating upgraded radios and engines. In that time, the aircraft have been used for a wide range of roles. Redtail Skyhawks have simulated enemy aircraft in air-to-air combat, and friendly aircraft in CAS training for the Marine Corps. Redtails have shot supersonic missiles at ships, and towed targets to be shot at by the very same ships. Redtails have flown countless missions to train battle group defenses, then returned to test those defenses in an adversary role. The A-4 performed flawlessly as a flexible platform for the Fleet Adversary mission: reliable, long-legged and stable for training ships...merciless, nimble, and fast for training strike-fighter pilots.

With the disestablishment of VC-8, an era ends. For the first time in fifty years, ships will deploy and airwings will enter harm's way without the benefit of the Skyhawk as either friend or foe.



Skyhawks Forever

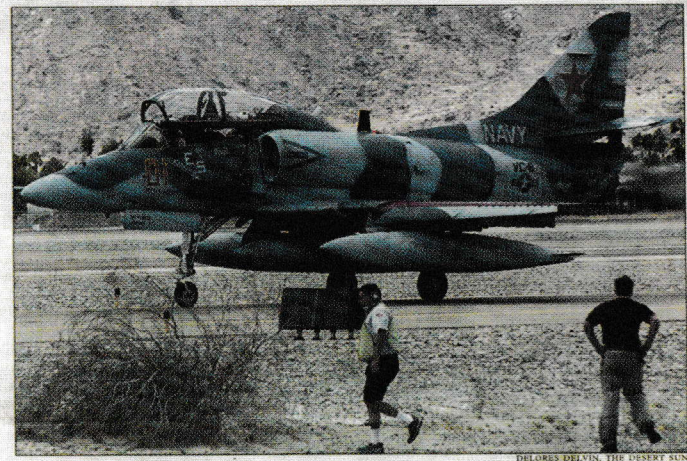


FINAL FLIGHT

CREW DATA (RECORD TYPE 7C. IF EXC CODE = G, L OR R; RECORD TYPE = 7D)									
NO	NAME	SSN	POS	FLY	CPT	SCT	ACT	STR	INS
11	WOODS, ROBERT	5185194413121	16.4	12.0	1.0	1.2	1.5		
12	COOPER, GREGORY		12.0	16.4	1.0	1.2	1.7		

TOTAL MISSION REQUIREMENT (TMR) DATA									
NO	NAME	SSN	POS	FLY	CPT	SCT	ACT	STR	INS
1	WOODS, ROBERT	5185194413121	16.4	12.0	1.0	1.2	1.5		
2	COOPER, GREGORY		12.0	16.4	1.0	1.2	1.7		

FINAL STATION: PALM SPRINGS AIR MUSEUM



Headed for new home: Pilots start leaving a Navy Skyhawk after landing Saturday at the Palm Springs Air Museum, where it will become part of the museum collection.

Cold War fighter retired



Skyhawk pilots: Navy pilots Lt. Rob Woods (left) and Capt. Greg Cooper address the crowd after landing Saturday.

Newest addition to air museum was last A-4 Skyhawk still in military service

By BENJAMIN SPILLMAN
THE DESERT SUN

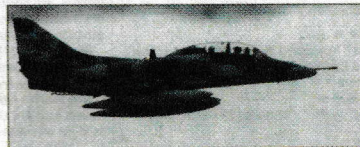
PALM SPRINGS — Another American link to the Cold War retired from service Saturday in Palm Springs.

The cold warrior stood silently on a tarmac at the Palm Springs Air Museum while friends celebrated the unprecedented airborne accomplishments the undersized, spindly-legged fighter achieved in a career spanning five decades.

Navy Lt. Rob Woods, the guest of honor's partner in their final mission together, described the unique relationship.

"It has got a lot of personality," said Woods, 32, of the unflappable Redtail 101, the last A-4 Skyhawk jet in active military duty. "You can do just about anything to it; the engine won't stall; the thing won't

In flight:
The air museum's new Navy Skyhawk makes a flyby before landing.



DELORES DELVIN, THE DESERT SUN

Please see SKYHAWK, B3



A SALUTE TO EDWARD HENRY HEINEMANN

Edward Henry Heinemann was born in Saginaw, Michigan on March 14, 1908. He moved to California in 1914 where he attended Manual Arts High School in Los Angeles. That is where his formal education ended. His extraordinary mechanical aptitude was recognized and nurtured in those early classroom days in a way that later would greatly pay off. His remarkable career began with the Douglas Aircraft Company in 1926 as a draftsman. He served as project engineer before becoming Chief Engineer in 1936 and Vice President for Military Aircraft in 1958. In 1960, he joined Guidance Technology as Executive Vice President and in 1961 became Corporate Vice President, Engineering, for General Dynamics, a position from which he retired in 1973. He was a man whose life spanned the golden age of flight, and whose foresight, determination, and genius provided the United States Navy, Marine Corps, and Air Force with some of the most reliable fighting machines ever to take to the sky.





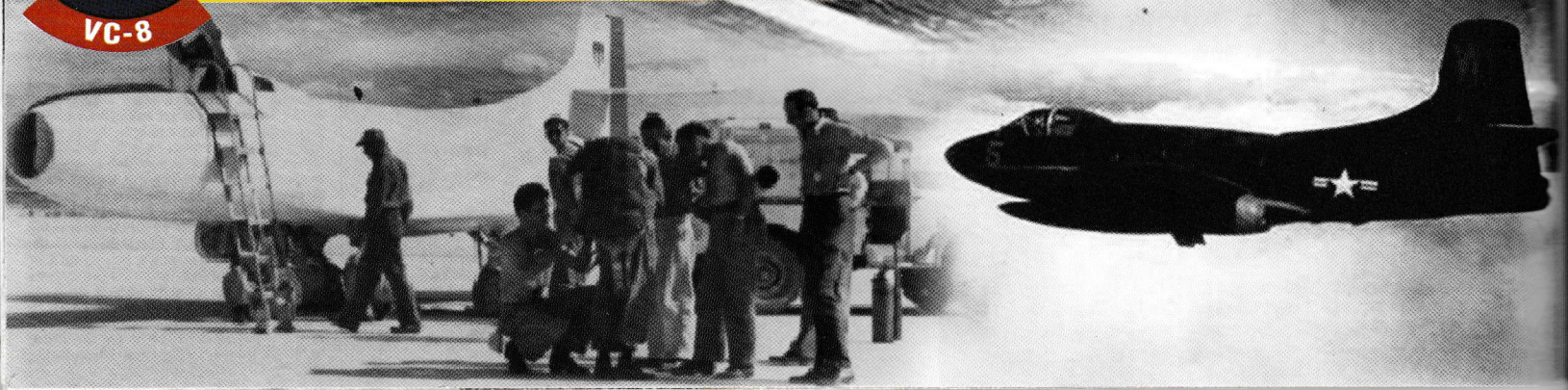
- Douglas SBD Dauntless
- Douglas AD Skyraider
- Douglas D-558-1 Skystreak
- Douglas D-558-2 Skyrocket
- Douglas F3D Skyknight
- F4D Skyray
- F5D Skylancer
- Douglas A3D Skywarrior

And the aircraft whose retirement we celebrate today, the Douglas A4D-1 Skyhawk.

HEINEMANN'S HOT RODS



VC-8



The Skyhawk, often referred to as “Heinemann’s Hot Rod,” enjoyed the largest and longest production run of any tactical aircraft in history, some 23 years! First flown in 1954, the A-4 served with tactical and training units throughout the Navy until its final flight on May 3, 2003. It has been said that the aircraft’s most significant contribution was its proof of the potential that exists when diligent engineering and hard work successfully marry up the builder and buyer.

Simple—efficient—effective. Three words capture the design of the A-4 Skyhawk. A radical departure from the increasingly complex and costly aircraft designs of the era, what became known as the “Bantam Bomber” shocked the aviation community with its performance.

It is difficult to overemphasize how innovative the A-4 was, not in technical sophistication, but in purity of design. The Skyhawk was born during the Golden Era of aviation, but not at the dawn of that era. Though the jet age was scarcely a decade old, aircraft design had already become the domain of organizations. The A-4 stood in opposition to this trend. In an age of aircraft designed by committee, the Skyhawk emerged, painstakingly true to the vision of one man: Mr. Edward Henry Heinemann. As one engineer who worked in the industry at the time wrote:

When the A-4 program started in the early 1950's, aeronautical engineering still had an aura of romance and mystery for those who watched from the outside. Chuck Yeager had only a few years before demonstrated that the fabled monster lurking on the other side of Mach 1 did not exist. In this dramatic context the story of Heinemann and his Hot Rod assumed the proportions of David confronting Goliath. The A-4 stood face to face with other design exercises that seemed driven by a star-struck wish to incorporate every possible exotic technology, the less-tried the better. The fact that Ed went back to the basics and undertook to create a design that was rooted in pragmatic engineering aroused the admiration of every spectator. We recognized it as a self-imposed challenge and we all hoped that he could pull it off. Now, fifty years later, we see that what he created has confirmed his engineering judgment to a degree never before seen in the history of aviation.

In recognition of his work, Heinemann in 1973, was awarded the Collier Trophy for “the greatest achievement in aviation in America,” as well as the Guggenheim Medal in 1978 in honor of his valuable contributions to the service of the Nation. In 1981, he was enshrined in the Aviation Hall of Fame and received the National Medal of Science from President Ronald Reagan on May 24, 1983. He was respected, beloved, and at home in the Naval Aviation community, and accordingly was awarded honorary Naval Aviator number 18. He was also a long-time member of the Tailhook Association.

Edward Henry Heinemann died on November 26, 1991 at the age of 83. No more fitting tribute could have been offered to his life and contributions than the fact that his handiwork, the A-4 Skyhawk, continued in active service to the nation for some twelve years following.

Thanks to the following for materials compiled for this tribute:

Rear Admiral Thomas F. Brown III, United States Navy (Retired).

The Skyhawk Association Website

Commander Rosario Rausa, United States Navy Reserve (Retired), co-author of “*Ed Heinemann, Combat Aircraft Designer*,” published by Naval Institute Press, Annapolis, Maryland, 1980,

Captain Steve Millikin, United States Navy (Retired), Editor of *THE HOOK* magazine