

The Skyhawk



Association Quarterly



26 years of production
Skyhawk II 2nd MAW

THE A-4 EVER

FALL 2004

Skyhawk Association

VOLUME 10 • NUMBER 4

Cover

Half a Century of Grace, Guts & Glory
— The 50th Anniversary of the A-4 —

*Skyhawk
Turns 50*

Millville Restoration • Attic Attacks • Gann's Gallery • R.G.'s Art • TINS • Puresome
Unplugged • First in Line • CDR Mike Trout • Size Does Matter • Take No Prisoners •

The Webbersite • Reunions &
Requests • Raver's Ramblings



www.skyhawk.org



THE PREZ SAYS

• Raven's Report •

By Bob "Raven" Hickerson

Recognition & Recapping Recent Events

Returning from the annual meeting of the *Skyhawk* Association at Tailhook 2004, I can't help but reflect upon the transition that took place at the meeting. After a decade of dedicated leadership of our association, initially as founder and later during two terms as president, Dave "Whizzer" White elected to "fleet down" for a well-deserved rest.

Whizzer has lived and breathed the best interests of the *Skyhawk* community for a long time, beginning with his seemingly innocent question uttered at Tailhook 1993: "Do you suppose anyone would be interested in starting a *Skyhawk* Association?" As it turned out, some people did believe that we could start an association of those who flew, fixed or just admired the *Skyhawk*, and the Wz was the first to put his name on the list of 132 people who signed up. Since that time, he has been the glue that held our group together. A lot of people agree with a good idea, but for ten years Wz has supplied the energy, creativity and drive that made this good idea a reality.

Wz will be serving as chairman of the Historical Committee, an important element of our mission to preserve the memory of the A-4 and those who served in the units that operated it. He will work

with the Naval Historical Foundation (NHF) to develop goals for this effort, as well as strategies to accomplish them. The Board of Directors approved a gift of \$3,000 to the NHF to provide initial funding for this effort. Wz will be look-

"After a decade of dedicated leadership of our association, initially as founder and later during two terms as president, Dave "Whizzer" White elected to "fleet down" for a well-deserved rest."

ing for members willing to help with this project. If you are interested, contact him at a4pilot@aol.com.

A week after our annual meeting, Vice President (Marines) Ed Jobin and I attended the Marine Corps Aviation Association's (MCAA) annual symposium, held this year in San Diego. While there, we met with a group of informally organized Marine *Skyhawk* veterans and discussed goals they have in common with the *Skyhawk* Association. Obviously, we found that we have a lot of shared interests, and as a result of the meeting, we're exploring a possible alliance between the groups. We'll provide more information on this as we move forward with detailed planning.

I'm honored to be president of your association and look forward to meeting as many members as possible. The association has accomplished a lot in the last decade – just surviving ten years is unusual for an effort like this. However, moving forward is going to take some work by all hands. As has been said by every president, we need a critical mass of members in order to support a viable program of publications, meetings/reunions and historical preservation. We can't just talk about increasing our membership, we've

got to do it! The board has elected to address this issue, and in the coming months, you will see some recruiting initiatives and incentives.

Meanwhile, take time to contact one friend or squadron mate and get him or her to join the *Skyhawk* Association. Better yet, give a membership as a Christmas present.

If each of us does that (really a very simple task), the *Skyhawk* Association will start its second decade as a thriving, dynamic group. It's up to us.

A-4s Forever,
Bob Hickerson
hickers@beecreek.net



Shown trying to cheer up Laib (in light shirt) after he delivered the treasurer's report, members Puresome and Lamers encourage the dancing girls to return all tips to him.



The *Skyhawk* Association booth at Tailhook '04: Totally ignoring the customer until they see evidence of cash money, Marie Powell (drafted yet gracious), Youthly (head booth maven), and A4 Secretary Terry Cooney, (counting and wrapping loose change) complete their 14th hour on the job for the second straight day. (photo by Boom).



Skyhawk Association, Inc.

Officers and Directors

Founded by M. Davis White

A4pilot@aol.com

Bob Hickerson

President and Director (FY 06)

hickers@beecreek.net

Jack Woodul

Vice President (Navy)

Puresome@comcast.net

Ed Jobin

Vice President (Marines) and

Director (FY 05)

ed.jobin@goodrich.com

Terry Cooney

Secretary

skyhawkasn@woh.rr.com

Ernie Laib

Treasurer and Director (FY 07)

ernielalib1@cs.com

John Gabbard

Director (FY 07)

john.gabbard@domsoftware.com

Ted Langworthy

Director (FY 07)

flybear@peoplepc.net

R.R. "Boom" Powell

Director (FY 06)

vigihawk@cox.net

A.D. "Bud" Southworth

Director (FY 05)

buds@walkerscl.com

David Weber

Webmaster and Director (FY 06)

darweber@verizon.net

Chuck Wolf

Director (FY 07)

wolfsindoorsoccer@earthlink.net

Skyhawk Association, Inc.

2421 Clubside Drive

Beavercreek, OH 45431

skyhawkasn@woh.rr.com

Website: www.skyhawk.org or

www.a4skyhawk.org

David Weber, Webmaster

darweber@verizon.net

BOMBS AWAY!

• Fall 2004 •



The Prez Sez: <i>What Raven now Thinks</i>	2
Seasonal Board Meetings: <i>The Leadership at Work in Reno</i>	4
R.G.'s Art	5
Gann's Gallery	5
Size Does Matter: <i>Modeling News</i>	10
Editorial: <i>Raven's Ramblings</i>	11
Take No Prisoners: <i>Letters to the Editor</i>	12
Twidget Goes Cyber: <i>the Webbersite</i>	12
Puresome Unplugged: <i>YP's Excellent Adventures</i>	13
Attic Attacks: <i>You Need To Do This</i>	13
Harken Back: <i>Remembering Mike Trout</i>	16
Scheduling Stuff: <i>Reunions & Requests</i>	18
Boom-Boom Room: <i>Powell's Puzzlers</i>	18
Read? You Think We Read? <i>Book Review</i>	19
New Paying Member\$: <i>Welcome & Thank\$</i>	19
TAPS.....	19
Ready Room Records: <i>Your SDOs</i>	back cover



Cover Story: <i>Half a Century of Grace, Guts & Glory</i>	6
First in Line	14
TINS	14
Millville Restoration	15

Newsletter Editorial Committee



Bob "Raven" Hickerson – Chairman and Editor.

Margaret "Warrior Princess" Bone – Managing Editor.

David "Twidget" Weber – Technology and Website.

Feature Contributors: Boom Powell, Jack "Puresome" Woodul, Davis "Whizzer" White, Joe Turpen, Ed "Viking" Jobin, Bud Southworth.

Published by the Skyhawk Association © 2004

Contributions

We actively seek contributions from members, including news, photos, historical documents, anecdotes and other items of interest. Submissions may be edited due to space limitations in the newsletter. Contributions may be emailed to the Newsletter Editor at newsletter-editor@a4skyhawk.org or mailed to Bob Hickerson, 1222 Balcones Drive, Fredericksburg, TX 78624.

Printed by NCCOAST Communications, Morehead City, NC. Stephanie Davis, graphics.

SKYHAWK ASSOCIATION

• Fall Board Meeting •

More Ramblings by Raven

Summary of Board Meeting Minutes

Skyhawk Association, September 10, 2004

The meeting was called to order at 8:35 A.M. by Vice President Hickerson at the Nugget Casino in Reno, Nevada. Directors Hickerson, Jobin, Langworthy, Laib (Treasurer), Powell and Southworth were present, constituting a quorum. Directors Weber and Wolf were absent. Secretary Cooney was also present. Members attending were John Lammers, John Gabbard, and Jack Woodul. Also present was *A-4 Ever* Managing Editor Margaret Bone.

The membership report indicated that membership is holding steady at approximately 700 members. Association finances are sound, but Treasurer Laib expressed concern over the high cost of producing the newsletter. The board discussed the importance of the newslet-

ter and reaffirmed its earlier decision to produce a publication of high quality. Under Old Business, the board discussed a possible change in IRS exempt status; approved the report of the nominating committee which proposed Langworthy, Laib and Gabbard for election to expiring and vacant director positions; reaffirmed an earlier decision to disburse proceeds from *Skyhawk* print sales to the Naval Historical Foundation and the National Museum of Naval Aviation (\$3,000 each); and tabled discussion of contracting with the Tailhook Association for administrative services.

New business discussed included a proposed slate of officers for the remainder of CY 2004 and CY 2005; plans for membership recruiting at the Marine Corps Aviation Association Symposium in San Diego Sep 15-17, 2004; strategic planning during CY 2005; and possibilities for commercial

affiliations and memberships. The board also discussed the possibility of having the annual meeting in 2006 in conjunction with MCAA in Washington, D.C. (discussion tabled until the February meeting). Finally, the board discussed initiatives to increase membership.

The meeting was adjourned at 1135.

The annual meeting of members was convened at 12:00 PM. An excellent talk was delivered by noted author Barrett Tillman. During the business meeting, the members elected Directors Ted Langworthy and Ernie Laib to new terms of office and elected John Gabbard as director in a vacant position. The meeting was adjourned at 1:30 PM. A special meeting of the board of directors was convened at 1:30 PM for the purpose of electing officers for coming year. The following slate was approved: President: Bob Hickerson; Vice President (Navy): Jack Woodul; Vice President (Marines): Ed Jobin; Treasurer: Ernie Laib; and Secretary: Terry Cooney. There being no further business, the meeting was adjourned at 1:35 PM.

Detailed minutes and reports may be found at www.skyhawk.org.

The 2004 SA Luncheon Program:

Barrett By Boom

After a delicious lunch (far better than the Hook's evening banquet), the newly installed president of our *Skyhawk* Association, Bob Hickerson, gave an appropriately brief welcome speech and conducted the *pro-forma* vote on new and continuing members of the board of directors. He then introduced Barrett Tillman the author

of over two dozen non-fiction books on aviation and five published novels; one of which is the only major work of fiction "starring" the A-4.

Barrett had read a preliminary draft of a novel called *For Each Other* and strongly recommended it be published. Never heard of it? The book became a

best seller and generated a movie after being retitled *Flight of the Intruder*. Coontz remembered Tillman's endorsement and knew of his other writing so asked him to contribute a novella to his *Combat* anthology. The result was *Skyhawks Forever*.

Barrett talked of where his characters came from and said for *Skyhawks Forever*, he found himself with a natural source among members of the association. The fictional school is based on Hoss ➡ ➡



President Bob shown pleading with members to pay for lunch before leaving the room, else he will be forced to take names....



With their right hands poised for a co-ordinated salute, Puresome, Sally Tillman and Barrett Tillman wait for Prez Hickerson to complete his thankfully brief remarks (see Boom's article) before dining on what appears to be open cans of tuna (see Boom's article). The *Skyhawk* Association was honored to have BT speak at the 2004 Luncheon Program, held at the Golden Nugget.



R. G. Smith, (1914-2001)
Named Honorary Naval
Aviator Number 10.



A-4 Luncheon cont...

➔ ➔ Pearson's ATSI with Hoss and his wife as major characters. The instructional staff includes a Puresome, an LSO resembling YHS, and a femme pilot after Lucy 'Juice' Young.

Warriors and *The Sixth Battle* are set in contemporary times and Tillman drew on pilots like 'Pirate' Nichols and Wynn 'Cap'n Hook' Foster (plank-owner, historian, first secretary and guiding light of the *Skyhawk* Association). Indeed, the airwing in the fictional CV in *The Sixth Battle* is CVW-16 and the attack squadron's callsign is "Old Salt". Barrett's two novels set in World War II (*Dauntless, the Novel* and *Hellcats, the Novel*) use characters modeled after real veterans whom he has interviewed for history books and "Foster Wynn" commands a TorpRon.

Still in work is a WWI flying novel with squadron COs Brown and Southworth and Brisfit pilot Langworthy. By the way, the love interest is a nurse named Lynn Foster.

Boom Powell

R.G.'s ART

• A-4s over USS Shangri-La •

We believe this painting depicts VA-106 A4D-2 *Skyhawks* over USS *Shangri-La* (CVA-38) during a North Atlantic and Med cruise in 1960-61.

◆
It's possible that the artist was inspired by photographs, such as the one shown left, taken in March 1961 by a VFP-62 RF-8 flown by LCDR Norm Youngblood.

◆
This flight was led by *Skyhawk* Association member Otto Krueger, then Ops Officer of VA-106.



HARRY GANN'S GALLERY

• The Hary Hole •



Harry Gann, (1925-2000)
Named Honorary Naval
Aviator Number 24.

Editor's note: Harry swore that this was a real photograph!
"The Hary Hole."

"If you are ever in a hole – call on the A-4"
Harry S. Gann Collection



© Harry Gann

HALF A CENTURY OF GRACE, GUTS, AND GLORY

First Flight - 22 June 1954

By Bob Hickerson



The Beginnings.

For experienced Douglas Aircraft test pilot Bob Rahn, his flight in XA4D-1 bureau number 137812 on the morning of June 22, 1954, must have been somewhat of an anti-climax. After two years of intensive design and development, the first A-4 reportedly slipped easily into its natural element, exhibiting the wonderful flying qualities that would later be loved by tens of thousands of *Skyhawk* pilots and make this machine at once a serious weapon and a docile trainer for advanced student pilots.



XA4D mockup with original design for tailpipe. Familiar tailpipe extension added later to eliminate exhaust soot on underside of tail.

Prior to that morning, Bob Rahn had already logged some 15 first flights in experimental aircraft, and certainly this first flight was not intended to include serious testing of the *Skyhawk*'s mettle. Like all first flights, it was largely ceremonial. Still in the future was the rigorous probing that would define the aircraft's envelope and capabilities. Much further in the future was the realization that this would be one of the truly great aircraft of all time.

Nukes Become Necessary.

Looking back with knowledge of 50 years of technical advances, it's easy to fail to appreciate how innovative the *Skyhawk* was in the early 1950s. The Navy was transitioning from a blue-water fleet built during World War II to a strategic force aligned with the priorities of the nuclear age. Every branch of the service was scrambling to develop the capabil-

ity to deliver strategic nuclear weapons, no small feat for a Navy constrained to limited space aboard an aging fleet of aircraft carriers. At the beginning of the Korean War in 1950, most of the Navy's carriers were too small to accommodate jet operations (given the performance limitations of the early jets), and propeller aircraft such as the F4U *Corsair* and AD *Skyraider* performed the lion's share of the attack sorties.

While nuclear weapons delivery was the glamorous mission of the day, a mission seemingly dominated by the new Strategic Air Command, the outbreak of the Korean War once again proved the worth of naval expeditionary forces anchored by aircraft carriers. Navy and Marine aircraft deployed on carriers provided an enormous percentage of the close air support and interdiction sorties that supported ground forces in Korea, but it was apparent to all that Navy propeller-driven aircraft were vulnerable to the emerging Soviet-built fighters of the day. If naval aviation was to survive, Navy carriers would have to be equipped with modern jet fighter and attack aircraft, capable of equaling the performance of land-based forces in all mission areas, including the delivery of nuclear weapons.

Smaller Really Is Better.

The problem with this requirement was size and weight. Since World War II, aircraft had been growing in size and weight at an alarming rate. Early in the 1950s, Douglas Aircraft engineers led by Chief Engineer Ed Heinemann began studying trends in aircraft design, and as a result, became alarmed at the propensity of aircraft proposals to increase in complexity, weight and cost during development (Sound familiar?). Heinemann was very sensitive to this

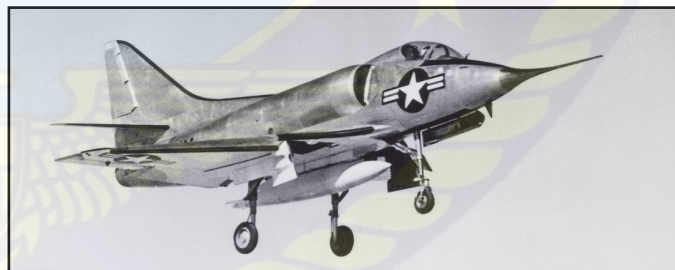
problem, having had two overweight WWII designs fail to advance to production because of poor performance. When he designed the legendary AD *Skyraider*, he and his team rigorously examined every ounce of growth in the design and subsequently brought that aircraft in a full 1000# under the design weight limit.

In the early 1950s, Heinemann and his team produced a study that demonstrated a surprising fact: for every pound of mission-related equipment added to an aircraft design, the aircraft's gross weight grows by another ten pounds in order to maintain a specified level of performance. Heinemann was convinced that disciplined design and production engineering could mitigate this trend and was invited to present his views to the Navy brass in January 1952.

On behalf of Douglas, Heinemann pitched his "rule of ten" and argued for better engineering as a solution to the problem. At the same time, he presented an unsolicited design for a "lightweight" fighter to Rear Admiral Apollo Soucek, Commander of Task Force 77 early in the Korean War. The Navy wasn't interested in a fighter proposal at that time, having just begun development of the F8U *Crusader*, but Admiral Soucek asked Heinemann to see if his concepts could be applied to a jet-powered attack aircraft needed to replace the AD *Skyraider*. Tasked to design a carrier-based, jet aircraft with a maximum gross weight of 30,000 pounds, including a payload of one nuclear weapon, the Douglas team went to work and developed in less than a month a proposal for the attack aircraft that would later be known as *Skyhawk*. [Elward]

Aw, No Way, Guys....

As a result of this work, Douglas proposed a very small attack aircraft (38 ft. long, wingspan of 27 ft.) with a gross weight of less than 15,000 pounds,



The *Skyhawk* era begins. Bob Rahn launches 137812 from Edwards on June 22, 1954.

capable of achieving a top speed of over 600 mph and a combat radius of approximately 450 miles. Navy officials at BuAer were decidedly skeptical when briefed on this proposal, but none-the-less authorized the Douglas team to conduct additional design studies.

The team immediately went to work in earnest and the now familiar design elements quickly emerged. These early decisions were critical in achieving the small, light and simple design of the aircraft that first flew on June 22, 1954:

◆ *Drawing on his experience with the F4D Skyray, Heinemann selected a low aspect ratio delta wing and limited it to a span of 27 ft., allowing the aircraft to fit onto existing carrier elevators without using a heavy and complicated wing-fold mechanism. This was a major departure from previous naval aircraft and contributed greatly to the simplicity of the Skyhawk design.*

◆ *The wing was constructed as a three-spar box, continuous from wing tip to wing tip. This design permitted incorporation of a "wet wing" fuel tank, requiring less fuel plumbing and thereby saving critical pounds.*

◆ *The slow-speed characteristics of the airplane (compromised by the small wing) were improved by the addition of aerodynamic leading edge slats that required no heavy and complicated hydraulic and electrical components.*

◆ *Selecting external weapons hardpoints rather than an internal weapons bay saved a tremendous amount of weight. Three external stations were specified, and the centerline station was rated for 3575 pounds carriage to permit attachment of a tactical nuclear weapon.*

◆ *The landing gear was designed to retract into the wheel wells with a forward motion, allowing a simple emergency extension system that used airflow to lock the gear in place in the event of a hydraulic failure. A related decision led to inclusion of an emergency system that permitted disconnecting the flight controls from a failed hydraulic system. Taken together, these decisions simplified the hydraulic system, eliminating a great deal of heavy and redundant plumbing.*

◆ *The customary (and heavy) storage battery was eliminated and replaced with a simple wind-driven emergency electrical generator.*

50 Years of Skyhawk Milestones

June 21, 1952	Contract for XA4D-1 awarded to Douglas Aircraft Company
February 1954	XA4D-1 rollout at El Segundo Plant
June 22, 1954	Test pilot Bob Rahn conducts first <i>Skyhawk</i> flight at Edwards
August 14, 1954	First production A4D-1 (A-4A) flight
September 1955	Initial carrier trials aboard <i>USS Ticonderoga</i>
October 15, 1955	Lt. Gordon Gray sets world speed record for 500 Kilometer course
March 26, 1956	First flight of A-4B
September 9, 1956	First fleet delivery of A-4 to VA-72
October 26, 1956	A-4 achieves operational status
January 1957	A-4 delivered to first USMC squadron, VMA-224
August 21, 1958	First flight of A-4C
July 1961	1000 th Skyhawk rolls off Douglas line
July 12, 1961	First flight of A-4E
June 30, 1965	First flight of TA-4
August 31, 1966	First flight of A-4F
May 1, 1967	LCdr. T.R. Schwartz credited with first A-4 MiG kill
April 10, 1970	First flight of A-4M
April 16, 1971	First fleet squadron receives A-4M (VMA-324)
September 1973	<i>Skyhawk</i> selected for Blue Angel duty
December 1975	Last USN A-4 line squadron disestablished
February 27, 1979	Last A-4 delivered to USMC (A-4M 160264)
August 1994	A-4 retired from USMC reserve (VMA-131)
September 9, 1995	<i>Skyhawk</i> Association formed
September 1999	TA-4 retired from VT-7
August 23, 2003	The end of an era: A-4 retired from last U.S. military unit – VC-8

Dates derived from Skyhawk Association website and McDonnell Douglas A-4 Skyhawk by Brad Elward (Crowood Press, Ltd, 2000)

Really? They Did it?

By June of 1952 the Douglas engineering team had incorporated these elements into an aircraft design that met all of the Navy's specifications and boasted a gross weight of approximately 14,000 pounds, less than ½ of the original limit contained in the specification. Based on this work, the Navy was sufficiently impressed to award Heinemann's team a contract to produce a design development aircraft for flight testing. The contract specified "a light-weight, single-engine, single-place, high-performance, carrier-based, day-attack capable plane, capable of dive-

bombing, interdiction and close-air support missions". It also required the ability to deliver both conventional and "special" weapons, as well as the ability to "attack sea and land targets with or without fighter escort where control of the air has not been established". [Gann]

The Navy allocated Douglas the bureau number 137812 for the flight

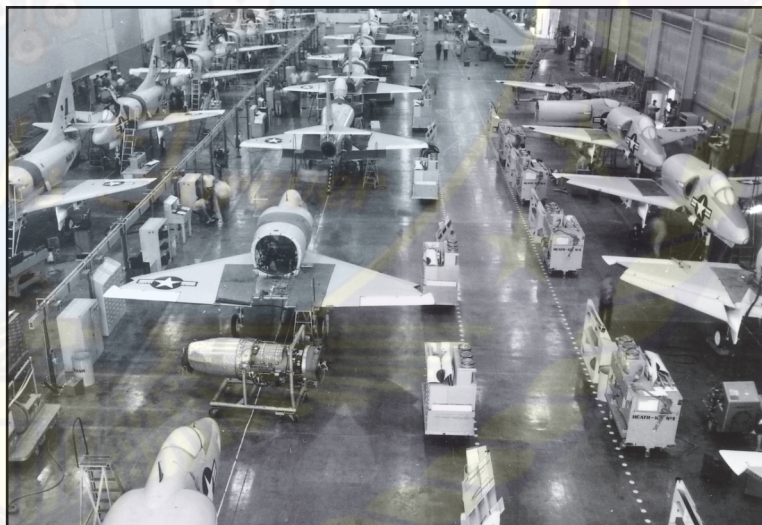


Photo from McDonnell Douglas press release of February 27, 1979 shows early A4D-1 production at Douglas plant.

THE 50TH ANNIVERSARY OF THE A-4 CONT...

test aircraft and work began in earnest. Quickly, an attack aircraft of truly impressive capability for its size and weight emerged. The XA4D-1 would gross out at 14,250 pounds with full internal tanks and a single MK-12 weapon loaded on the centerline. In that configuration, it would have a combat radius of 400 miles and the ability to climb to 50,000 ft. Its maximum level flight speed at sea level (clean) was estimated at 596 knots or .9 mach. This speed was later verified when the aircraft broke the official world's record for the 500 kilometer, closed-course previously held by the Air Force's F-86H *Sabre*.

Half as Heavy,

But Ready to Rock & Roll.

Today these numbers seem modest, yet according to Harry Gann "the weight of the aircraft was one-half that of contemporary fighters and bombers, with one-third fewer parts than required for a 30,000-lb aircraft. Maintenance was reduced by 40%, and overhaul time was one-half that for contemporary aircraft. The aircraft was 100 kts faster than and its radar signature 1/100th of the specification requirements. Fuel consumption was approximately one-half of other jet aircraft." Remarkably, the production cost was under the target limit of \$1.0 million per aircraft, achieving a cost of \$860,000 each for the first 500 aircraft. [Elward and Gann]

In October 1952 Navy personnel examined a mock-up of the A-4 and decided to award contracts authorizing 19 pre-production aircraft. Employing something of a leap-of-faith, Douglas decided to go directly to fixed-rate production using regular tooling, betting on the ultimate success of the design. This allowed the company to produce the first ten aircraft in the time normally allotted to produce one experimental plane. During the ensuing months, fleet naval aviators and maintenance personnel went to the factory to provide input on cockpit configuration and maintenance procedures.

Over the next year, production progressed with only minor setbacks. Development of special machines to shape the

one-piece wing spars proved problematic, and drilling of holes in high-strength aluminum to very close tolerances challenged the machining capability of that era. However, the production schedule slipped a mere 15 weeks from start to rollout.

Another Douglas Sky something...

In February 1954, Douglas rolled out the first XA4D-1 (137812) at the El Segundo plant and gave it the name "Skyhawk" in accordance with their tradition of naming their aircraft with a variation on the "Sky" theme. 137812 was strictly a flight test platform. Initially, it had only one external weapons station (the centerline), carried no armament, had an instrumentation probe on the nose and was not fitted with a tail hook. After static engine testing, the plane was trucked to Edwards for the flight test phase to be conducted by test pilot Robert O. Rahn and other Douglas pilots.

Bob Rahn had been with Douglas Aircraft Corporation since he left the Air Force in August 1945. In WW II, he was a fighter pilot assigned to the 309th Fighter Squadron flying the Supermarine *Spitfire* and P-51. Upon return to the United States he was assigned to the second class of the Air Force Test Pilot School, sharing that honor with legends such as Dick Bong, Don Gentile and Glenn Edwards. At Douglas, he participated in the testing of the AD *Skyraider*, the F3D *Skyknight*, the F5D *Skylancer* and the F4D *Skyray*, setting a world speed record in the latter. He was obviously well qualified for this first flight and the subsequent testing that followed.

At Edwards Air Force Base in Muroc, California, the morning of June 22, 1954, was desert-clear and perfect for flying. Bob Rahn launched *Skyhawk* 137812 on an uneventful, 40-minute flight he described as "excellent." He took off on the north-south runway of the dry lake bed, rotated at 125 knots and climbed to 15,000 ft. He kept the speed modest, probably below the 345-knot range where tail vibrations were noted on subsequent flights. Upon returning to Edwards, Rahn had high praise for the handling characteristics of the little aircraft. [Ortiz]

No experimental aircraft is perfect as it rolls off the assembly line, and the XA4D-1 was no exception. The first two production A-4s, bureau numbers 137813 and 137814, flew in September 1954, on or ahead of schedule. Douglas and Navy pilots flew 1,544 flights in twelve production aircraft in the test program, and XA4D-1 (137812) was slowly transformed into the A4D-1 (later re-designated A-4A under the Navy's revised naming system). [Gann]



SNORT (Supersonic Naval Ordnance Research Track) at China Lake was used to troubleshoot the rudder vibration problem. Shown here is the original rudder configuration.

Sugar Scoops and Tadpoles.

Early in the testing, pilots noticed a vibration in the tail area. After a significant amount of troubleshooting, the symptom was traced to rudder vibration and skin cracks were found under the rivets at the trailing edge of the rudder. This problem reached its peak during flights leading up to the world-record speed attempt, and Douglas engineers decided the rudder wasn't strong enough to withstand the forces of high-speed flight. To fix the problem, the rudder's internal ribs were moved to the outside of the skin, and the result came to be known as the "tadpole" rudder. This fix was intended to be temporary, but it worked so well that it became a standard feature on the A4D-2 (A-4B) and later aircraft.

An un-commanded, random wing drop at high altitudes and certain speeds was also noticed in early test flights. To fix this problem, *Skyhawk* was fitted with small fins (known as vortex generators) outboard on the upper wing surface. A buffeting problem, caused by separation of the airflow over the fuselage at the aft end of the vertical stabilizer, was

harder to diagnose. This vibration was eventually fixed by placing a fairing over the top of the tail pipe just below the trailing edge of the vertical stabilizer and rudder. This addition was called a “pen-nib” fairing by the Douglas engineers, but was later referred to as the “sugar scoop.”

Welcomed to the Fleet

In September 1955, the Navy tested *Skyhawk's* sea legs with simulated launch and recovery tests at Patuxent River, followed by initial carrier suitability trials aboard *USS Ticonderoga*. In October 1955, the Navy and Douglas prepared for and attempted a speed record for the 500 kilometer closed course. Lt. Gordon Gray was successful on October 15th, achieving an official speed of 695.163 mph. Lt. Gray's record-setting flight was a historic first for an attack aircraft and will be highlighted in a future article in this journal.

The Navy conducted weapons tests in late October of 1955, followed by the Navy Bureau of Inspections and Survey (BIS) trials that were completed in March 1956. Operational testing by the fleet pilots of VA-72 at NAS Quonset Point, Rhode Island, quickly followed. The VA-72 Bluehawks flew more than 600 hours on six aircraft, putting the *Skyhawk* through every conceivable test to determine its readiness for fleet service.

VA-72 took delivery of the first fleet *Skyhawks* in October 1956, and the aircraft officially began its operational service on October 26, 1956. VA-125 became the first replacement air group or RAG, VA-93 became the first operational Pacific Fleet squadron, and in January 1957, the A-4 became operational in the first Marine Corps squadron, the Bengals of VMA-224.

Ain't Over til it's Over.

Years of successful operations ensued, and *Skyhawk* is still going strong at the ripe old age of 50. Today, active in the military of several foreign countries, serving as a contract adversary and pilot training platform with Advanced Training Systems International and becoming the “personal jet” of choice for a growing number of very lucky (and presumably wealthy) individuals, *Skyhawk* is taking

its rightful place among the great legends of aviation. Its production run lasted for over 27 years, with 2,960 aircraft delivered to the U.S. Navy and Marine Corps, as well as four foreign countries.

Undoubtedly there will be more “favorite” and “beloved” aircraft in the future (as there were in the past), but there can be no doubt that the A-4 *Skyhawk* will always occupy a special place on the short list of the very best aircraft that ever flew. Happy Birthday, *Skyhawk*. A-4s forever!



How Skyhawk Spent Her 50th Birthday

Demonstrating that 50 is not really that old, *Skyhawk* was busy on her birthday last June 22, 2004.

Although not in active service with the U.S. military, Advanced Training Systems International (ATSI) operates single and two-seat A-4s from its base at Williams Gateway Airport, Chandler, Arizona. June 22nd was a typical day for ATSI – their *Skyhawks* flew 7.8 hours/6 sorties that day, a combination of student and IP training. The student sorties were mostly instrument hops for student pilots from the United Arab Emirates preparing for advanced F-16 training by the USAF.

Although ATSI held no special commemoration of the A-4 birthday, A-4N 262WL (shown here flown by Paul “Booger” Valovich) flew the 50th Anniversary flight on June 22nd.

We have no details of foreign flight operations on any given day, but on the 50th birthday approximately 150 *Skyhawks* were active in the military of foreign countries: Argentina, Brazil, Germany (contract), Indonesia, Israel, Kuwait, Malaysia and Singapore. On June 22nd, ATSI had four *Skyhawks* deployed to Canada. However, they had no flight operations on the 50th birthday.



A4D-1 137812 is readied for historic first flight.

References:

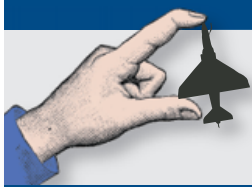
Brad Elward, *McDonnell Douglas A-4 Skyhawk* (Ramsbury: Crowood Press, Ltd., 2000).

Harry Gann, “Douglas A-4 Skyhawk Variants,” *Wings of Fame, the Journal of Classic Combat Aircraft*, V.4, (Aerospace Publishing, Ltd., London, 1996).

Harry Gann, “Besides, It's Fun To Fly, McDonnell Douglas' A-4 Skyhawk,” *The Hook*, Vol. 18, No. 4, Winter 1990.

R. Ortiz, *Birth of the A-4, Trials and Tribulations* (Unpublished manuscript, compilation of information gleaned from tech reps and military personnel, date unknown).

Harry Gann, “Where Are They Now,” *Skyhawk Association Newsletter*: Vol 5, No. 2, Spring 1999.



SIZE DOES MATTER

• Modeling News •

By Joe Turpen

50 Years of Skyhawk Models: Part One

Almost as soon as the *Skyhawk* took to the air, the model industry began production of this aircraft. The first kits in the 50s had very little detail when compared to those of today. The *Skyhawk* has seen

vast improvements in both the quality and quantity of kits produced over the years, however, and a variety of after-market products such as decal sheets and conversion kits are now available.

There are a large number of *Skyhawk* kits available, and just a few are reviewed here. There is additional, more detailed information provided on the *Skyhawk* website (www.skyhawk.org) which includes some appropriate source material. This review will allow the reader see some of the variety and number that have been produced.

Note: Special thanks go to Jim Winchester for sharing his list of kits with the author.

(Ed. Note: Stay tuned for more of the same, next issue.)



A4D-1 (A-4A) Some of the first kits available of the A4D-1 exhibited problems of accuracy and detail. One of the worst, released in 1957 and still available, is produced in 1/72nd scale by Airfix. Lindberg and Revell produced it also. Generally, these kits have value only for kit collectors and not for serious modelers. As far as I know, there is no good kit of the A4D-1 available.



A4D-2 (A-4B) The A4D-2 (A-4B) kits exhibit better detail and quality. Other than the two-seaters, the A4D-2 may be the model of the Skyhawk with the fewest kits. Fujimi, Hobby Craft and Hasegawa produced it in a variety of markings.



A4D-2N (A-4C) The smallest A-4C kit was issued by HBM Models and is 1/200th scale. Fujimi produced a 1/72nd scale kit. Kinzey lists this kit as F-26, stating that it is a model of the A-4C flown by T.R. Swartz when he shot down a Mig-17 using air-to-ground rockets. However, the bureau number is shown as 149645, when the actual number of T.R.'s aircraft was 148609. An A-4Q was released by Revell Mexico in 1/50th scale as well.



A-4E/F This is the Skyhawk variant that has had the most kits produced and reissued and seems to be the most popular. The record for the smallest kit goes to Nichimo Models for their 1/300th scale kit of the A-4F. The Hawk (IMC) 1/72nd scale provided battle damaged parts. As a young modeler, this feature attracted me to the kit.



A-4M The A-4M has also been the subject of many kits. In the summer of 2004 Hasegawa released an A-4M kit that will probably become the benchmark for all A-4Ms. It has markings for VMA-311 and VMA-214, and an aftermarket kit by Dragon is available. The kit appears to represent an early version of the A-4M, but can be upgraded with the Angle Rate Bombing System (ARBS) by using the A-4M conversion kit made by Cutting Edge.



A-4E/F Probably the best 1/48th kit produced in the 70's and 80's was the A-4E built by Monogram. Their kit was considered the gold-standard for that time frame. The original kit had markings for VMAT-102 and VA-144, and was re-issued with Blue Angel and adversary markings.



FROM THE EDITOR

• Raven's Ramblings •

By Bob "Raven" Hickerson

While researching technical data for the cover story in this issue, I was once again struck by how much the A-4 community lost with the passing of Harry Gann. Even in his absence, Harry remains "Reference A" for all things *Skyhawk*, and we will be forever in his debt for all he did to capture the technical data and folklore surrounding the A-4.

Speaking of folklore, you may notice a new feature in this issue called "Attic Attacks." This month we're featuring a kneeboard card that Puresome found while cleaning out the attic and packing for his move to the mountains in New Mexico. We found that card interesting because it chronicled a memorable mission **and** underscored an important point: we all need to start thinking about collecting our memorabilia for use by future historians in their research.

I know what you're thinking: nothing I have left from my *Skyhawk* career could possibly be of interest to a historian. I used to feel the same way, but we were wrong. Everything is of interest to historians. The artifacts that you find mundane might someday help someone to fill in the human side of an important story.

Here's an example – an aunt brought me a page from a spiral-bound notebook that belonged to her brother, a B-26 tail-gunner in World War II. The notebook chronicles 61 missions flown from England in 1943-44, and it is wonderfully cryptic. Each mission is summarized by one line: "Aug 13th, 1943 – road junctions, France, no flak, milk run." "Sep 14th, 1943 – Brest, flak, **landed on beach.**" "Dec 23rd, 1943 – Germany, plenty of flak and ME-109s, got a fighter, **ship got hit** – a rough one!" "Jan 7, 1944 – **bailed out of Dolly.**"

That uncle never thought his notebook would be of interest to anyone, and I'm certain he would have been very surprised to learn how much I wished he had kept more of his memorabilia to pass along to future generations.

So, take a hint from Puresome and clean out, attack your attic. Assemble the artifacts that will otherwise one day go straight into a garbage bag. If you see something of interest to *Skyhawk* enthusiasts, write a piece for this publication, or simply submit a map, card or photo to the Editorial Committee for consideration (include a narrative, of course). If you were a packrat and have lots of material, consider donating it to the Naval Historical Foundation. *Skyhawk* Association is partnering with that organization to capture the history of the *Skyhawk* community. Whizzer White, our past president and founder has agreed to head the Historical Committee and take on this important task. Standby for more information from the Wz, and in the meantime, start attacking!

Hickerson

Spread some **A4** EVER Christmas Cheer ~ Gift Memberships!

A Christmas gift card will be sent in your name to the lucky recipient ~ 4 issues of *THE A-4 EVER*

For more information refer to the website www.skyhawk.org or

email the Skyhawk Association at skyhawkasn@woh.rr.com. For credit cards, call toll-free 877-944-4295.

Join or renew at \$30 and give a gift membership to someone for \$20 at the same time.



Order additional patches

No flight suit/jacket should be without one of these outstanding patches. Additional quantities may be purchased for \$5.00 each (\$6 for non-members) plus \$1 postage, by sending your check or money order (no credit cards yet, sorry) payable to Skyhawk Association along with your name address and membership number (found on your card) to:

Skyhawk Patch
6213 Glen Abbey Ln
Bradenton, FL 34202-9265

Join the Skyhawk Association and get a free patch

One of these outstanding patches will be included with each **new** membership. Want more than one patch? (Who doesn't?) See ordering info at left.

Memberships are **1 year - \$30** (\$35 Foreign)

3 Years - \$75 (\$90 Foreign) in US funds.

☐ New _____ Years

☐ Renewal \$ _____ Total Enclosed

YES, Sign me up! Send my patch and membership materials to:

Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ E-mail _____

Call sign/nickname _____ A-4 hours _____ A-4 Traps _____

Skyhawk Squadrons: _____

Credit Card Payments may be made by calling toll-free **877-944-4295** from 8 am to 4 pm Pacific time. (This number is for dues payments only and cannot accept patch orders or other Association messages.)

Join by mail: Send payment in US funds to:
Skyhawk Association
2421 Clubside Dr.
Beavercreek, OH 45431-2503

TAKE NO PRISONERS

• Letters to the Editor •

newsletter-editor@a4skyhawk.org



Hey gang!

I just received my latest quarterly and wanted to pass on kudos to those who made it happen -- not only now, but ten years ago. This issue is certainly a keeper. Also, loved the Marine adjusting the brim of his cover.

My heart did flips when I observed the line-up of the ATSI unit on the flight line in AZ. Moreover, my wife, Sandi, stated, "...hey, I love that 'still eating fighters for breakfast' theme...who are those guys?" Notably, Sandi kept my drive going when I was XO of VC-5, trying my damndest to get the adversary mission off the blocks. We had a lot of 'those guys don't have the stuff' from the likes of Tooter Teague, who was then -- I believe -- the 7th Fleet COS. Fortunately, CFWP's RADM Gus Eggert, and later RADM Jack O'Hara, kept the faith and we made it happen. *Eagle* McClung was the leader at NFWS at the time, and was also a great assist to our success, as was then Lt *Smiles* Bucchi, our instructor, who has certainly gone on to bigger and better things. That was the best peacetime tour a guy could ask for.

Please note that I've included in the addee list those living near (Lakeway/Austin) me (Hickerson/Langworthy), as well as those who might know me, (Powell/Southworth/White) since this is likely meaningless to others. Boom and I were air wing shipmates in CV-63; Bud and I squadron mates in VT-7.

Regretfully, the only close association with the 'org' was during the 'stand-down' of the Scooter in PNS some years ago. It's not often you see grown men cry at the sight

of a mass of aluminum, wires, and hydraulic fluid standing on three little rubber tires and skinny struts, when the 'twirlies' were turned off and the canopy closed. Saw a lot of old friends then...including *TR* who was my division officer in VF-41 when I was enlisted. It seemed that I unconsciously chased him around for years, as he was XO/CO of the *Rock Rivers* when I was a *Champ* during my department head tours in *Corsairs* in CV-41, thankfully now 'saved' in San Diego. That too was a great tour. In stark reality, it was he who influenced my returning to the Navy as a NavCad three years after my original enlistment.

Knowing that, short of VA-127 FRP duty, my only *Skyhawk* time was as an adversary pilot, I was curious to note that the ready room records did not illustrate SDOs for any VC squadrons nor NFWS. I was pleased, however, to see NAF El Centro listed, as I also had a CO tour there (cream of the second team?), and brought in the Corpus TA4 permanent dets with CNATRA staff cooperation. With VC-8 being the last of active duty A4s, I'd think they would be listed. Anyhow, I have a few of the old *Checkertails* in my email address book that might be interested in telling old lies, etc. Accordingly, if I could help along those lines, please let me know. {Ed. Note: Twidget, sign him up!}

My "I love me" room is filled with typical Navy junk, including the Scooter illustration with signatures -- number 6 of 850 as a matter of fact. All I have to do is shut my eyes and feel the canopy rails of my old E and T models rubbing against my shoulders.

Guess age is beginning to show, huh gang?

Anyhow, enough Scooter emotions for now. As you can see, I've cc'd a couple of old *Checkertails* to let them know about 'wassup' with the *Skyhawk* Association. Not even sure if they are members. *Nitro* and *Bag* can check-in if it's germane. I'm sure their memories 'creep-up' now and then. Anchors Aweigh and Launch 'em!

VRWR,

Mike Boston

Member #248

Twobostons@aol.com

◆ ◆ ◆

To the Editor:

To all *Skyhawk* enthusiasts,

I have volunteered to lead a project restoring A-4D1 (Bureau Number 142230). The plane is currently displayed in front of the Building 1 at NSWC Crane, Crane IN.

The plane requires a new coat of paint. Existing paint does not appear to be aircraft grade, it seems that previous restorers used general-purpose outdoor paint. What is the best way to remove the old paint? Where could we obtain correct aircraft grade paint? Any suggestion / contact info regarding repainting the plane and restoring original paint scheme would be much appreciated.

The plane also requires a new canopy. Existing canopy is cracked at several places. Any suggestion / contact info that would help us obtain a new one from military salvage / surplus would be much appreciated.

I have also been told that the plane's tires have been filled with concrete mix. I don't know how to approach this problem. Again any suggestion would be much appreciated.

Very Respectfully,

ENS Kresimir Odorcic, USNR

GE Consumer & Industrial,

KRESIMIR.ODORCIC@APPL.GE.COM.

TWIDGET GOES CYBER

• www.skyhawk.org •

By David "Twidget" Weber

In the last issue I offered to help any association member with their first purchase of a computer, to permit access to all the great *Skyhawk* information on the Internet. *Offer still stands!* Send me a "snail" mail via the address shown below.

You may have noticed in the last newsletter the use of www.skyhawk.org, and www.a4skyhawk.org. Well, both are correct.

The former was our original Internet address (URL for you techies), and the latter we added because -- well, because we could. Better we have it than someone else. Both will work and get you to the same showcase of Heinemann's Hotrod. Since "a4skyhawk" is more definitive for the Internet search engines, it's the one I normally use.

I am also building a "technical help web

site," covering computing and photography. I'm just getting started with it, but will add more data as time permits. The address is www.darw.com

Please keep in mind that our association can always use more volunteer help. We need a new SDO-Coordinator--it's an easy job, some would even say a fun job, so send me an email if you are interested.

darweber@verizon.net

David "Twidget" Weber
1517 Lindby Drive
Flower Mound TX
75028-3624

PURESOME UNPLUGGED

• YP's Excellent Adventures •

READY ROOM-A-RAMA, NUMERO 106

The skipper was having trouble keeping his lads awake for the post-lunch AOM Intelligence Briefing. The Powers That Be demanded certain "X's" be put in boxes, but the usual fare put out by the Air Intelligence Weenie, droning on about the number of stacks on Commie Russian Kenda warships, or whether it was the Faggit or the Fresco that had the fillet, was sure to cause snoring in those recently come from cheeseburger overload. Since some innovation went along with the infallibility thing for the Rocket One position, the skipper had gone out

slide showing the amenities of the crew head had struck a spark of interest in a pilot, call-sign Moon, who sat up and followed every gesture of the pipe.

The skipper was, of course, sitting up in his King Chair at the front of the ready room and did not see Moon stick his hand up with the first question that arisen from the lecture. Had he seen the intrepid aviator with the strange glitter in his eyes who had raised his hand, he might have anticipated the direction of the question and squashed Moon like a particularly disgusting, hairy bug.

"Had he seen the intrepid aviator with the strange glitter in his eyes who had raised his hand, he might have anticipated the direction of the question and squashed Moon like a particularly disgusting, hairy bug."

of his way to try and find SOMETHING interesting to fill the training requirement.

Today's brief was by a distinguished, pipe-smoking Black Shoe, the very model of the modern engineering officer, surely at one with superheated steam. He had put together an informative brief on the U.S.S. *Missouri*, featuring before-and-after slides of the battleship's makeover prior to active duty shelling Gomers from the waters of the Tonkin Gulf.

The Black Shoe was knowingly among the Heathen, but he gamely displayed his knowledge of the subject, gesturing with his pipe to illustrate points in his lecture. He reached a slide showing one of the original battleship crews' heads. It was fundamental in the extreme, being essentially a trough occasionally flushed with seawater, and fired upon from either side and above from planks across the trough. It was the first word in utility and the last word in privacy. But, hey, there had been a war on.

The cream of Attack Naval Aviation had sunk into post-lunch torpor, but the

But the distinguished Black Shoe stopped his lecture and aimed his pipe at the aviator in the back row.

Moon stood up and earnestly axed, "Where do the turds go?"

The Black Shoe just swiveled his pipe back around to the screen and clicked on the next slide, droning on about the interesting life of evaporators.

But it was too much even for the Olympian status of the skipper, and the outbreak of snockering began at the very top and crested, finally, at the very back of the ready room. Surely, the whole episode proved that nothing ever changed in Scooter squadrons, and that scoff-law tradition was alive and well. It was expected that some hits would be taken along the way.

Certainly, it also proved again to the Distinguished Black Shoe that boat drivers were absolutely necessary to add tone to what otherwise would be a disgusting brawl aboard the floating aerodromes that sadly populated the fleet.

ATTIC ATTACKS

Cleaning out the Attic

Chaps:

Stuff you find while packing--a kneeboard card from a night recce mission off Yankee Station. The WHOOPIE (Beautiful!!!) comment at the top was the last part of a note--I used the flip side to write Tunita (Mrs. YP) while on Condition One RESCAP, 17 OCT 1965 (big raid up north of Hanoi, lost a couple of F-4s). Card is filled out with black felt tip (brand new technology) to make it readable in red night lighting.

YP

P.S. I dropped a 150'x12' steel Hwy bridge yesterday. Saw him!!!

BTN: (18)	308.2	(18)	(17)
A/C	PILOT	BTN	SWIMMER
404	WOOD	I	2400 / 0130
404	WOODAL	II	22
404	EAC	EFB	070 / 330 / 20 / 15
			240 / 25 / 10 / 0143 / 060
			T 78
			1645 / 108 47
			105 / 66
			105 / 36
			1757 ①
			10632
			0100 ②
			BINGO

"BONECRUSHER" 25 ⑨

"BLACK VELVET" 21 ⑤

"SMOKESKIN" CHARLIE RED

SKYLARK - M16

298 / 150 mi. VNH SON

ON TOP + 5 mi

Palmetto 341.0

115 MILS

Think!

*Before you toss,
will history be lost?*

(see Raven's editorial, pg. 11)

FIRST IN LINE

Twidget Examines Priorities

By David Weber



Most people are generally very happy to be the “first in line,” but sometimes it just isn’t the best place to be. For example, consider being the first *Skyhawk* recovered during a carrier’s launch/recovery cycle. This is a good thing, right?



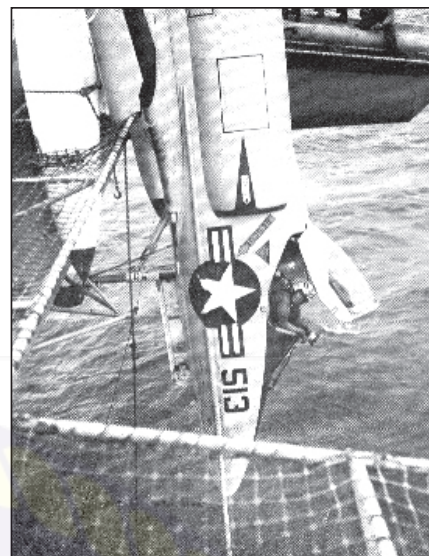
Letting it all hang over.

As the *Skyhawk* driver taxis out of the landing area, his thoughts are probably: “I was first in the pattern so I’ll be first to the ready room, first for the debrief, and the first to the coffee pot.” As he follows the direction of the flight deck Yellow Shirt in front of his aircraft, he is directed forward of the island and towards the starboard side of the ship. There he is handed off to a second Yellow Shirt who keeps him moving starboard and forward until his right main tire is rotating right next to that little deck edge wall that keeps aircraft tires on the deck and out of the catwalk – most of the time.

He continues to taxi towards the bow. And he taxis and taxis. He is blessed with a clear view of the ocean ahead as he is the “first in line” to park on the starboard side. Behind him trails a plane captain dragging half a dozen tie-down chains, wondering if his aircraft is ever going to stop or just keep right on taxing over the bow.

As the *Skyhawk* reaches that part of the flight deck that is most forward of the island, the Yellow Shirt finally has the *Scooter*’s nose swung around to the left to minimize the deck space used. Now the *Skyhawk*’s nose tire is as far forward as there is flight deck, and the safety net protruding from the bow is dangerously close to losing its honor of being the very most forward object on the ship. The *Skyhawk*’s refueling probe appears to be protruding out in front of the net. The aircraft is so far forward that the plane captain can’t find a tie-down ring in the deck that is forward of the nose strut.

He does the best he can, but the nose tie-down is stretched out far to the left, and downwind, of the aircraft’s centerline. Being so far forward, finding a way to tie down the two mains is not easy either; however, the aircraft somehow stays on deck, the ladder is attached and the plane captain goes up it to aid the pilot in his egress from the aircraft.



Maybe too far?

The ship is cruising into the wind at a considerable clip to make the desired wind over the deck for recovery, so standing on top of the ladder is comparable to standing on top of a car roof going down the road at 40 mph. The unconcerned driver egresses the cockpit, glides down the ladder and leaves. Meanwhile, the plane captain is hanging onto the cockpit rail to keep from being blown off the ladder while stowing the “head knocker” and placing the seat safety pins. He can’t help but notice that he can look straight down and see the bow wave of the ship.

He asks himself: what kind of man does it take to fly a combat mission, come home to the boat and trap, and then smoothly taxi the aircraft practically off the front of the carrier?
ARE THESE GUYS NUTS?

(Editor’s note: Trying this on a dark, stormy night when the deck is pitching makes it a truly special experience, worthy of “E” ticket status at Disneyland.)

TINS

By Boom Powell

“They Missed”

Summer, 1967. LCDR George Fenzl of VSF-3 traps aboard *Intrepid*, CVS(A)-11. He knows he was hit while bombing in North Viet Nam. He can see a jagged little hole in the canopy of his A-4B. There’s been a windy whistle for the last hour. It’s his plane captain who finds the second hole in the canopy. Higher and on the other side. Same size. On the hangar

deck, the squadron pilots gather round as George sits in the seat and pulls the canopy down. A line between the two holes goes right through his skull. Puzzled expressions. Finally, someone hollers to look through the bombsight. George leans forward as generations of *Skyhawk* pilots have done. The two holes are behind his head. He had been hit while in the bomb run. If he had been sitting up straight, he would not be alive. TINS.

A-4F RESTORATION

A-4F *Skyhawk* now on display at Millville Army Airfield

By David Weber



A-4F 154200 Data File

Operational Service.....	1967 – 1994
Total Flight Hours	8045
Total Landings.....	3755
Total Arrested Landings	292
Total Catapults	262
First Squadron.....	VA-192
Last Squadron	VC-12

Millville Army Airfield, New Jersey, a WWII heritage and aviation museum, partnered with the New Jersey Academy of Aviation Science (NJAAS) to restore A-4F Bureau Number 154200 in the markings of the VA-55 *Warhorses* circa 1971-1975. During that period, VA-55 deployed several times aboard *USS Hancock* with CVW-21.

NJAAS is an FAA approved and certificated airframe and powerplant school. Instructor Dennis Pierce, a former Marine aviation technician who worked on A-4 aircraft while on active duty, spearheaded the project to provide practical experience for his students.

This A-4F has an interesting history. After serving with VA-55 through 1975, BuNo 154200 spent time with the Marine Reserves in El Toro before assignment to VC-12 at NAS Oceana in 1983. She next served with VC-12 until retirement and was then given to the Millville Army Airfield Museum for display. 154200 was trucked from Virginia Beach to Millville in 1994, where she sat awaiting restoration for approximately seven long years before Mr. Pierce's A&P class went to work. The restoration project cost approximately \$10,000, with most of this funding provided by the Cumberland County Technical Education Center.

Dennis Pierce describes the project in this way: "My original prediction for

project completion was nine months due to the condition of the aircraft. Several items for the aircraft had to be fabricated out of composite materials. Some of these items included teardrop panels, wingtips, missiles and guns, and count-

year students, only having one month of exposure to aviation. The majority of our students have no experience in aviation prior to registering at NJAAS."

Skyhawk Association member Terry Wolf attended the roll-out ceremony for

the restored A-4 in August 2004 and reported: "Thanks to your forward of Guy Robbins' email, I went to the Millville Airfield for the roll out of their restoration of 154200. I had flown the aircraft while with VA-55 from '72-'74. Attached is a photo of the finished product and a picture of me with the group that did the work. I had a great visit with this group



N.J.A.A.S. 2004 Scooter Team

W. Meehan, G. Lush, C. Ruble, C. Mann, W. Boyer, S. Dougherty, A. Tate, F. Armstrong, C. Stoerle. Not present - J. Flood, F. Mazza.

less other damaged areas that required patching. Also, the aircraft was in dire need of a new paint job. The paint job was duplicated from a model kit box. We had to re-scale the logos and paint

and recommend that anyone who can go by the field at Millville, N.J. do so. They would love to meet anyone who had any connection with this aircraft."

The aircraft will be displayed in a hangar at Millville Army Airfield, which was established in 1941 for the training of P-47 pilots. All available funding was used to restore

the aircraft, so the museum will rely on donations to pay for regular maintenance. Anyone desiring to make a tax-deductible donation for this purpose should contact Guy Robbins at the museum. More information is available on their website at www.p47millville.org. Information on the New Jersey Academy of Aviation Science is available at: <http://www.cumberlandtec.nj.us/description.htm>.

"Instructor Dennis Pierce, a former Marine aviation technician who worked on A-4 aircraft while on active duty, spearheaded the project to provide practical experience for his students."

HARKEN BACK

• The Way We Were •

The contributions of Mike Trout to our country
and to the *Skyhawk* Association.

After attending Canoe U, Ensign Mike Trout, United States Navy, entered Navy preflight training at Pensacola. A year and a half later Mike won his Naval Aviator wings-of-gold and chose to fly Attack Aviation.

He reported next to the VA-125 Rough Raiders Replacement Air Group (RAG) to learn to fly the A-4 *Skyhawk*.

In the fleet Mike flew the A-4 *Skyhawk* in VA-195 Dam Busters and VA-93 Blue Blazers. As a Blue Blazer, Mike made two combat tours to Vietnam flying hundreds of combat missions.. In all, he went down to the sea four times: The 11-21-59 to 05-14-60 CVG-19

tour to WestPac was on USS *Bon Homme Richard* (CVA 31) where Mike had 122 A-4B traps. The 04-26-61 to 12-13-61 CVG-19 tour to WestPac was on USS *Hancock* (CV 19) where he had 47 A-4C traps. The 01-05-67 to 07-22-67 CVW-5 combat tour was on the *Hancock* where he had 89 A-4E traps. The 01-27-68 to 10-10-68 CVW-5 combat tour was from *Bon Homme Richard* where he made 270 A-4F landings.

Early in 1974, Mike was assigned to VA-45 as executive officer. CDR Trout was XO for two years, being extended to allow returning POW, CDR Leonard Hyatt, to re-enter a normal career pattern as the Blackbird Commanding Officer.

On July 1, 1976, Commander, Naval Air Force, Atlantic Fleet charged Mike to develop and provide an Air Combat Maneuvering program for the Atlantic Fleet. This challenge was Mike's meat! Admiral J. L. Holloway III, the Chief of Naval Operations, recognized this when

he awarded VA-45 the 1977 Naval Aviation Safety award and Plaque for the most outstanding safety record achieved among special mission squadrons in the United States Atlantic Fleet.



In May 1976, Mike became the twentieth VA-45 Blackbird Commanding Officer. CO Mike standing behind the blackbird - smiling.

In 1998, Mike emailed the *Skyhawk* Association Webmaster to offer information about the squadrons in which he flew. Soon Mike was in charge of gathering, organizing and presenting *Skyhawk* statistics. Later he took the task of recruiting and organizing Squadron Duty Officers (SDOs) for each of the hundreds of squadrons that flew the *Skyhawk*.

Little did correspondents know that Mike had Amyotrophic Lateral Sclerosis (ALS). Earlier, ALS had struck down baseball player Lou Gehrig, and ALS is now commonly known as Gehrig's disease. This brutal killer affects the spinal cord and lower brain stem. This progressively degenerates motor neurons and wastes muscles until the paralyzed patient painfully dies, with death usually occurring 18 months to seven years after ALS onset.

When Mike first contacted the SA Webmaster in June 1999, he did not expect to last until Christmas. Mike was all but



Commander
Michael D. Trout,
United States Navy



paralyzed, confined to bed and waiting to die. He used a voice-operated computer to communicate on the Internet. In that condition he organized *Skyhawk* Website statistics and started communicating with people - soon he wanted to recruit and organize the Squadron Duty Officers. Doctors were perplexed as to why Mike didn't die - but here was a guy that flat on his back, in pain and paralyzed, still found a way to make himself useful and meaningful - right up to five days before he died. What balls!!! Mike Trout is an example for all of us.

Sunday, October 21, 2001, Mike Trout was bingoed to the USS *Great Beyond* Ready Room. There he is playing *Acety Duecy* with Wade McClusky. Lou Gehrig and Ted Williams are offering sage advice. Lounging around the room in small groups are the guys: Boisterously discussing tactics are Chennault, Nimitz, Boelka, Thatch, Caesar, Bong, Richthofen, Bader, and Patton. Pancho Barnes, Estocin, Springs, Doolittle, Shea, Blackburn, Fonck, McCudden, Shepard and Halsey are playing poker. A bunch of guys are gathered at the bar tended by Lady Jessie. The Duke, Boyington, O'Hare, Perry, McConnell, Bong, Voss and Scott are drinking flaming hookers while others are clustered about a piano singing lusty songs. On the patio they are servicing the Dilbert Dunker for the follies soon to follow. Commander Michael D. Trout, United States Navy, is not alone - he is with the guys and we should be happy for him, as his was a life well spent.

HARKEN WAY BACK: A LAUNCH

From the *Bonnie Dick*

By Mike Trout



From the unfinished collection of *Skyhawk* stories that Mike Trout was writing, which would have been co-authored by his friend Bud Southworth. *For your reading enjoyment.*

It was a routine launch from the *Bonnie Dick*, with a dusk recovery. The only aircraft not on the schedule were the hangar queens. We were going back to Yankee Station and we needed to hone our flying after being in port at Subic Bay. The weather forecast was for increasing cloudiness in the area. There was some talk of canceling the launch but the need to get some cockpit time won out. As recovery time approached, more and more flights were reporting instrument flight conditions with tops above angels 20 in some quadrants. CIC broadcast a message to all aircraft that one aircraft would be brought down on an instrument approach to see if a VFR pattern could be maintained below the overcast. If it couldn't, the time that would be required for all aircraft to make instrument approaches would put many aircraft below bingo and some at low state.

Attack aircraft wouldn't usually be first down the tube. That privilege went to the fighter types, ostensibly because their

We went on the gauges while descending to marshal, which must have been at 15,000 feet and 25 nm aft. I went into

"No one said much about the landing, except the LS0 who wasn't very coherent. No one ever bothered to tell me why the ship was in a turn when I broke out."

holding since we would have to fly the pattern once before the approach time. Arriving at marshal on time, I detached my wingman to continue holding and pushed over. This is a piece of cake, I thought. Starting this low and in close, I'll be aboard while my buddies are still boring holes in the clouds, waiting for their approach times to arrive. So I enjoyed the cozy atmosphere of the cockpit created by the glow of the red instrument lighting, which was the only light that I had seen for the last 10 minutes.

At 10 nm, I was in the dirty configuration. CATC had asked for a weather

"It's incredible! The ship is turning starboard! No time to think. The extended centerline is sweeping port and away from me at a horrendous rate."

fuel states were lower and their aircraft more difficult to land. The rest of us knew that it was just to give them time to join their buddies who, immediately after the second seating, would glom onto all the seats behind the Commanders' row for the wardroom movie. That night, however, a section of VA-93 Blue Blazers in their A-4 Foxtrots got the honor. I assumed that it was because they wanted the best pilots for the job but it may have been because we were closest to the marshal point.

report nearly every thousand feet of my descent. The clouds were solid all the way. At 1200 feet I could still see nothing beyond my wing tip lights. I was still in the clouds approaching the glide slope on the 3 o'clock AofA. The CATC final controller marked my interception of the glide slope and I popped the boards. 1100 feet. Still in the clouds. 1000 feet. Making lots of cross checks between the altimeter and the radar altimeter now. 900 feet. Still in the clouds and pucker factor increas-

ing linearly. 800 feet. Still in the clouds, still on glide slope. 700 feet. Where in h _ _ _ is the bottom of this stuff? 600 feet. Pucker factor increasing exponentially. 500 feet. The controller asks if I'm VFR; I key the mike and give him a quick negative. The controller keeps giving me instructions calmly, and I follow them but not calmly. 400 feet. This is starting to get hairy. The green card is supposed mean that you have too much sense to go to 200 feet. 300 feet. I'm going to . . . Then I'm out of it. It's like a curtain instantaneously raised and everything is clear and there's the . . . What the h _ _ _!!!?

It's incredible! The ship is turning starboard! No time to think. The extended

centerline is sweeping port and away from me at a horrendous rate. Snap the left wing down . . . jockey the throttle to try to keep the ball somewhere on the mirror. . . intercepting the centerline . . . have to lead it . . . NOW—snap the right wing down, right rudder, power. . . lined up, level wings with the deck--touchdown--throttle to the firewall--slammed forward in the harness-- GOT A WIRE!

The run out was a little right of centerline, not much, especially considering the ship was still in a turn. Release brakes, pulled back by the wire (#3, of course), hook up, brakes on, chocks in. And there I stayed until the ship was out of the turn, with the yellow shirts, the green shirts, the blue shirts, all lining up along the side of the island to see the guy who had just cheated death. I could have been parked nearly anywhere on the flight deck because the rest of the air wing had been binged to Cubi Point.

No one said much about the landing, except the LS0 who wasn't very coherent. No one ever bothered to tell me why the ship was in a turn when I broke out. No one commiserated with me that by now my buddies were lifting tall, cool ones at Cubi again. There was only one compensation for the fastest reactions that I ever had to make in an airplane. That night I sat in the row behind the Commanders for the wardroom movie.

SCHEDULING STUFF

• Reunions & Requests •

Sir:

I'm looking for any squadron mates of my Dad, LT William Roark, who was killed during a mission in Vietnam on 7 Apr 65. He was with VA-153 Blue Tail Flies flying from the USS *Coral Sea*. Appreciate any help.

V/R- Bill

LCDR Bill Roark

TACRON 21

(Currently deployed. roarkw@saipan.navy.mil)

Editor's Note:

In Omaha, Nebraska, Central High School will honor Lieutenant William Marshall Roark, USN, on 7 October, 2004 with his induction to its Hall of Fame. LT Roark was killed in action attacking targets near

Dong Hoi, North Vietnam as pilot of a Navy A-4C *Skyhawk* jet of Attack Squadron 153. He was flying from the aircraft carrier

USS *Coral Sea* on April 7, 1965, while on his second deployment to the Vietnam conflict. Roark had served as cadet colonel and commanding officer of Central High School JROTC regiment and graduated from the U.S. Naval Academy in 1960. For

his heroism in combat, he was awarded the Purple Heart and the Distinguished Flying Cross. The destroyer/ frigate USS *Roark* (FF-1053) was named in his honor in 1967. A plaque on the USS *Roark* quotes from a letter Lt. Roark sent his wife. "I don't want my sons to fight a war I should have fought. I wish more Americans felt that way. I will not live in a totalitarian society and I don't want you to, either. I believe in God and will resist any force that attempts to remove God from society, no matter what the name. This is what the Founding Fathers stood for."

VMA-225 Reunion at Cherry Point:

Thursday, 21 October to Sunday, 24 October, 2004. Contact Mr. Cary Pickens @ 812-926-3849, or hillfarm75@hotmail.com.

I am looking for my dad's shipmates who served with attack squadron 152 from 1964-1966, on the USS *Oriskany* (CVA 34). My dad was J.J. Buterbaugh adr2. Please reply to joetta41@yahoo.com. Thank you.

I am Fred Moore, in 1958 my squadron VF-94 (later changed to VA-94), was aboard the Carrier USS *Hornet* CVA 12, any chance someone might suggest where I can get information about the Air Group and the 1958 Far East Cruise? F.X. Brady was the squadron's commanding officer. Captain Connelly was the commanding officer of the USS *Hornet*.

Sincerely,
Fred Moore
foomoo@earthlink.net.

Since *Skyhawks* were aboard *Midway* and one is now on display, we thought your membership would appreciate the following updates: The USS *Midway* is now open in San Diego as our nation's newest aircraft carrier museum and is enjoying enormous success. For more info, see www.midway.org. The first book on *Midway's* unmatched 47-year odyssey – based on over 300 *Midway* crew interviews – debuted nationally this summer. More info at www.midwaymagic.com. One of the most poignant stories focuses on *Skyhawk* aviators.

Scott McGaugh, USS *Midway* Marketing Director and author of *Midway Magic* may be contacted at scott@midwaymagic.com.



BOOM-BOOM ROOM

• Powell's Puzzlers •

Powell's Puzzlers are put together by one of the more puzzling minds in the *Skyhawk* Association, and only those with an incisive, encyclopedic knowledge of all things *Skyhawk* should risk brain cells by attempting to solve the puzzlers.



Question 1: What is the common term for the ejection seat safety handle that pulls out of the pilot's headrest?



Question 2: What is the small red circle on the edge of the intake? (hint: located on the starboard side only)

Question 3: How many Volt-Amps do the A-4's vortex generators produce?

Answers:

Question 1: The "head-knocker". It is the final ejection seat safety mechanism and is stowed in the headrest just before taxi. It was designed to knock the pilot on the back of his head as a reminder should he forget the critical checklist item of arming the ejection seat. The original design was too short and an extension was later added to the handle.

Question 2: The light that illuminates the air-refueling probe on the right side of the aircraft. The light is red so it does not interfere with night vision.

Question 3: The vortex generators on the wings and slats are aerodynamic features and do not generate electricity. They were added early in testing to counteract a random wing drop tendency. This was a favorite question on NATOPS quizzes in the old days, designed to catch the pilots who were truly asleep during training.

READ? YOU THINK WE READ?

By Raven

McDonnell Douglas A-4 SKYHAWK

Brad Elward

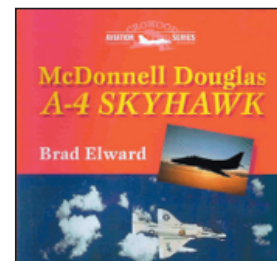
The Crowood Press, Ltd.

192 pages.

I'm probably not a typical *Skyhawk* aficionado. Although I flew the A-4 for over 25 years and was very knowledgeable of the later models, until recently I knew very little of the history of the aircraft. I don't know why I wasn't more curious about the early days of the *Skyhawk*, and now I'm sorry that I didn't take the opportunity to pick the brains of some

of the pioneering Douglas tech reps and engineers I was privileged to know during my career.

Those opportunities (to learn from the pioneers) will never be available again, but owning a copy of Brad Elward's *McDonnell Douglas A-4 SKYHAWK* is the next best thing. While it is clearly a reference book, chock full of lists and technical details, I found myself reading the book cover to cover and enjoying every minute. I drew heavily on this work while preparing this issue's story on the 50th anniversary of the first flight of the *Skyhawk*.



Published in 2000 and covering the *Skyhawk* lineage from start to finish (including all the foreign variants), Elward's book is one of the best comprehensive references on the A-4 available. I recommend it as the place to start in building your *Skyhawk* reference library. For more suggestions, see the *Skyhawk* Association bibliography at <http://www.a4skyhawk.org/2C/source.htm>.

Raven

NEW PAYING MEMBER\$

• Welcome & Thanks\$ •

Alderson, Steven, Florissant, MO
Benes, Ed, Merced, CA
Conry, Luke, Fitchburg, MA
Cornella, Michael, Salt Lake City, UT
Cunningham, Tim, Glendale, AZ
Edwards, Roy, Raleigh, NC
Ely, John
Glennon, Robert, Carlsbad, CA
Green, Mike, Cashmere, WA
Grose, Dennis, Scottsdale, AZ
Heitel, Ken, Sarasota, FL
Hostetlar, Marc, Pendleton, OR
Ingham, Curtis

Jones, Eric, Mission Viejo, CA
Kidrick, James
Kirschke, Douglas, Tustin, CA
Klothe, Ken
Krone, J.R.
Langston, Nick
Logie, Robert
McDermott, Sean
McGee, James
McNeece, James, Crownsville, MD
Naff, Peter
Nangle, Charles
Orr, Bud

Pereira, Dave, Lake Mathews, CA
Pierce, Dennis, Millville, NJ
Proctor, Edwin, Lincoln, NC
Renella, Marco
Richardson, Sam, El Dorado, AR
Sexton, Rodney, Conroe, TX
Shepard, Greg, Ft. Myers, FL
Slyfield, Jack
Stover, Gene
Strickland, William, Burr Ridge, IL
Sullivan, John, St. Simons Is., GA
Svoboda, Tom, Fox River Grove, IL
Wallace, Dave
Walters, Jim, Chiloquin, OR
White, Dave, Bement, IL
Williams, Mark, Edmonds, WA

TAPS

Thomas M. Corkhill
Reginald F. Lewis
Robert P. Guay



TAPS notices may be sent to
Bob Hickerson, Newsletter Editor at
newsletter-editor@a4skyhawk.org



or mail to



Bob Hickerson,
1222 Balcones Drive,
Fredericksburg, TX 78624.



For TAPS lists,
members may
access these links:

www.a4skyhawk.org/2D/KIA.htm
www.a4skyhawk.org/2E/ops_losses.htm

Current Squadron Duty Officers

MAG-12	Outlaws	David Prendergast	dprendergast@foggy.net
NAF	China Lake	Gary Verver	gverver@earthlink.net
NAF	El Centro	Gary Verver	gverver@earthlink.net
NARUNAS	Dallas	David A. Weber	darweber@verizon.net
NAS	Glenview	David A. Weber	darweber@verizon.net
NAS	Lemoore	David A. Weber	darweber@verizon.net
NAS	Patuxent River	Gary Verver	gverver@earthlink.net
NAS	Point Mugu	Gary Verver	gverver@earthlink.net
NATF	Lakehurst	Gary Verver	gverver@earthlink.net
NMC/PMTC	Point Mugu	Gary Verver	gverver@earthlink.net
NWEF	Albuquerque	Gary Verver	gverver@earthlink.net
VA-106	Gladiators	Dick Carlberg	dickberg@skyhawk.8m.com
VA-112	Bombing Broncos	Dick Twilde	rwtwild@compuserve.com
VA-12	Flying Ubangis	Austin O'Brien	aobrien1@cfl.rr.com
VA-125	Rough Raiders	Steve MacMillan	stevemacmillan@bellsouth.net
VA-134	Scorpions	Bob Krall	rkralla4@aol.com
VA-144	Roadrunners	Bernie White	DotBern@aol.com
VA-15	VALions	William B. McManus	wmcmanus@cox.net
VA-153	Blue Tail Flies	Stan Thompson	stan@shellmonster.com
VA-163	Saints	Ed Copher	ecopher@satx.rr.com
VA-164	Ghost Riders	John Nelson	jrnelson@hctc.com
VA-172	Blue Bolts	Dennis Hughes	dvhughes@mindspring.com
VA-203	Blue Dolphins	Dave Dollarhide	davedollarhide@msn.com
VA-204	River Rattlers	Gary 'Alpha' Aaron	alphanavy@earthlink.net
VA-205	Green Falcons	John Goodman	johngoodman@earthlink.net
VA-212	Rampant Raiders	Steve Gray	captsrg@aol.com
VA-216	Black Diamonds	Paul Galanti	pgalanti@comcast.net
VA-22	Fighting Redcocks	Bryan Remer	bryan@remer.com
VA-22	Fighting Redcocks	Mike Morrison	va22morrison@cs.com
VA-23	Black Knights	Chuck Wolf	wolfsindoorsoccer@earthlink.com
VA-34	Blue Blasters	Chuck Blum	flyingbinc@aol.com
VA-36	Roadrunners	Ted Langworthy	FLYBEAR@peoplepc.com
VA-43	Challengers	John Gabbard	john.gabbard@domsoftware.com
VA-44	Hornets	Paul 'Holly' Hollandsworth	HollyNav@aol.com
VA-46	Clansmen	Dave Dollarhide	davedollarhide@msn.com
VA-55	Warhorses	David A. Weber	va55sdo@a4skyhawk.org
VA-56	Champions	Randy Bob Wilson	srwilso1@comcast.net
VA-64	Black Lancers	John Lamers	jplamers@charter.net
VA-66	Waldos	Ray Dermody	rjva66@aol.com
VA-72	Blue Hawks	John Lamers	jplamers@charter.net
VA-76	Spirits	Bob Lomba	boblomba@juno.com
VA-776	Lobos	Jerry Kopff	jerry@jklphotography.com
VA-81	Sunliners	Richard Shipman	ship@vnet.net
VA-86	Sidewinders	Dallas Nanney	a4sdo@pahump.com
VA-93	Blue Blazers	Tom Wondergem	auggie@tampabay.rr.com
VA-94	Shrikes	Jack Matechak	matecha@attglobal.net
VMA-134	Skyhawks	Mike Sandlin	mikesandlin@cox.net
VMA-214	Black Sheep	Steve Linder	lindersteve@msn.com
VMA-224	Bengals	Vic Britt	vicbritt3@aol.com
VMA-225	Vagabonds/Vikings	Bob Paul	vma225@wowway.com
VMA-311	Tomcats	Bob Polhamus	rpolhamus@adelphia.net
VMA-322	Fighting Gamecocks	John Margie	jomargie@attbi.com
VMA-332	Pokadots/Moonlighters	Mike Sandlin	mikesandlin@cox.net
VMAT-103		Mike Sandlin	mikesandlin@cox.net
VT-24	Bobcats	Steve Linder	lindersteve@msn.com
VT-25	Cougars	Thomas Bass	fort1729@charter.net
VT-7	Eagles	A.D. 'Bud' Southworth	skyhawk@cnw.com
VT-86	Saberhawks	Mark Morgan	lobo76mk@aol.com
VX-4	Evaulators	Gary Verver	gverver@earthlink.net
VX-5	Vampires	Gary Verver	gverver@earthlink.net

READY ROOM RECORDS



♦ Navy and USMC Squadrons ♦

We encourage all members to make contact with the Squadron Duty Officer (SDO) assigned to the units in which you served. Each squadron SDO maintains a roster of unit members that is a great resource for planning events and collecting squadron history.

If your unit does not have an SDO, consider volunteering. There are only two prerequisites: to have served in the unit, and to be an association member in good standing. For units without an SDO listed, contact the SDO-Coordinator - David A. Weber at darweber@verizon.net.



1983 photo of NWC China Lake A-4M 160245 over Rose Valley near China Lake. (collection of Gary Verver.)