

THE A-4 EVER

SKYHAWK ASSOCIATION JOURNAL VOL 22-1



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Skyhawk Association Annual Meeting

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www.a4skyhawk.org



THE PREZ SEZ

By Bill "Jigger" Egen

TRAMPAS

There was something about Chu Lai in the monsoon season. Some of the missions seemed to run down hill like you know what. After a briefing by the S-2, my flight was instructed to report to the Ready Room trailer (think house with wheels in a bad part of town) to get up to speed on using the AGM-45 Shrike. We had previously received lots of briefings, but this was my first launch. I was approaching 40 missions, so there was enough salt on my flight suit to convince me I knew what I was doing. There was an SA-2 SAM site just north of the DMZ that had bagged a couple of Marine A-4s several months before, and on one mission, the pilot was KIA. The site had been hammered immediately, but new info from the S-2 claimed that it was active again. The Wing wanted it targeted on demand - therefore, hotpad! We went over missile performance, switchology, ECM gear and tactics. Part of the refresher training included listening to ECM sounds, such as singer high, singer low, etc. Lots of guys turned those things off to get rid of the noise! After several hours of briefings and audio recognition, we were sent to pre-flight our birds and Shrikes. It was raining like Noah had a plan, and the pre-flight was wet and quick.

We were then officially on standby for a launch, and we were sleeping in the ready room until, as anticipated, we were given a launch time of zero-dark-thirty in driving rain. After another quick pre-flight check, we slithered into our cockpits with compact cassette recorders for additional sound recognition training while waiting for the launch signal. Things seemed to be going along fine. We were listening to the tunes, strapped in and watching the monsoon do its thing.

The plan was to launch in section, and as we approached the DMZ on top of the weather, have one bird stay high and one go low. The high bird

was to simulate a TPQ-10 controlled radar bombing mission, working with one of the Air Support Radar Teams (ASRT) close to the DMZ. The low bird was to be prepared to go "down the throat" with a Shrike launch. That was the plan.

All of a sudden, there was a loud roar along with a vibration/shaking that really got my attention. There was electrical power on the birds with the ordnance guys doing their thing, but all I saw was heels and elbows as the ground crew scrambled to evacuate the area. It didn't take long to join the evacuation! I was rapidly leaving the area when the roaring sound quit. Later, we were able to figure out that the gas grain generator in the control section of the Shrike had actuated, probably because of static electricity. The gas caused very rapid cycling of the guidance fins, creating a loud exhaust noise and buffeting of the aircraft. While we were hashing over the options, the mission was cancelled.

Most of the squadrons had been running this type of mission for the last several months, just not with the unintended actuation of the Shrike control section! It was an Iron Hand mission, but of course, the Marines had their own acronym: TRAMPAS -- Tired Raggedy-Assed Marines Pissing at SAMs!

SKYHAWKS

This year is the 60th anniversary of the introduction of the A-4 to fleet squadrons. VA-72 at NAS Quonset Point was already part of the A-4 Fleet Introduction Program (FIP) early in 1956, but received the first factory-to-fleet delivery of an A4D-1 (A-4A) in late September 1956. That same month, VMA-224 at MCAS El Toro received their first A4D-1, and the rest is history! There are still 47 flying A-4s with the largest share belonging to Draken and Top Aces, who provide contract air support to DoD. The week



Bill "Jigger" Egen

before I started this ramble, I noticed A-4s flying over the house working out of MCAS Cherry Point. They must have been Draken from the color scheme. This really helps the dreams of strapping one on again! Check out Hun's "Still Flying" article in this issue.

The Skyhawk Association, as keeper of the flame, is holding strong at 840 members. We have a goal of 1000, and one of our best recruiting tools is *The A-4Ever* journal put together quarterly by our editor-for-life, Bob Hickerson. If you participate in or sponsor a squadron reunion, we can provide recruiting material, such as journals and (more importantly) applications (contact us at sa-editorial-board@darw.it). Recently, we have been implementing web page upgrades, and the Skyhawk Association web page (www.a4skyhawk.org) is another good recruiting tool. Pass the word to old squadron mates.

Along those lines, we try to have a single POC for the Navy/Marine A-4 units, but we need more volunteers. Check out the "Contact List" under "The Association" on the Skyhawk Association home page to see which units need a Squadron Duty Officer (SDO). Let us know if you are interested (sa-sdo-coordinator@darw.it). Having said all that, one key option to get the word out about meetings, reunions, etc. is to send out emails to members. Recently our secretary sent a note to members about the winter digital journal on the web page, and he got 22 "bounces." If you change your email address, please let us know (skyhawkasn@gmail.com).

continued on page 4...



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(1939-2007)
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BOMBS AWAY!

• Spring 2016 •

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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 Journal Editor at sa-journal-editor@darw.it or mailed to Bob Hickerson, 1222 Balcones Drive, Fredericksburg, TX 78624.

Stephanie Davis, graphics, skyhawk@ncflight.com. Printed by NCCOAST Communications, Morehead City, NC.

On the Cover: Draken A-4Ls on departure from the Los Angeles County Airshow at Fox Field, CA, ca. 2013.

Photo courtesy Trent Bell [tsbellphoto@gmail.com] via Gary Verver.

NEED YOUR HELP

This is a repeat of the some of the same info presented in our recently-published winter digital edition, which you can access by clicking on the link on the Skyhawk Association web page (it's not necessary to log in). As a work in progress, we need your help to identify some of the "unknowns" in our database. Over 1500 A-4s have been lost over the years, and we are missing data on about 600. Yes, we talk to the Safety Center and request AARs, etc. We use every resource available and still have holes in the data. In fact, we have not been able to identify the pilots involved in the 5 Navy and 5 Marine accidents listed below. In the winter journal, the first Marine loss listed was A-4E 151998 from VMA-211 which was lost on 27 Jan '66 due to a JATO failure at Chu Lai. Bingo! We received many inputs, including the name of the pilot, Capt Doug Selby, who walked away from the crash. That email exchange also gave us additional information on other accidents. This issue, we have added a VMAT-102 loss for your examination and input. Hopefully these incidents will tweak some synapses in the steel trap minds of our gentrifying student body. Help us out with these if you can.

- VA-43, A-4A, 139961, 28 Sept '60, Oceana; pilot/circumstance unknown.
- VA-22, A-4B, 144896, 9 Jan '61, USS *Midway*; pilot/circumstances unknown.
- VA-164, A-4B, 142123, 14 Mar '63, Lemoore; pilot/circumstances unknown.
- VA-66, A-4C, 149534, 25 May '66, Oceana; pilot/circumstances unknown.
- VA-112, A-4C, 148567, 12 Aug '66, Lemoore; pilot/circumstances unknown.
- VMA-224, A-4E, 150034, 27 Jan '66, Chu Lai; unknown pilot OK - NORDO landing accident with arresting gear not rigged properly.
- VMA-214, A-4C, 148535, 12 May '66, Chu Lai; unknown pilot OK- landing accident.
- VMA-211, A-4E, 151029, 26 Dec '67, Chu Lai; unknown pilot OK- test hop- hydraulics failed.
- VMA-311, A-4E, 151198, 6 May '68, Chu Lai; unknown pilot OK- mid-air leaving the A Shau Valley with VMA-223 A-4C, 145096 piloted by Capt Manuel Guzman. Both pilots rescued.
- VMAT-102, A-4C, 148508, 17 July '70, MCAS Yuma; pilot/circumstances unknown.

Please email us at sa-a4-research@darw.it with any details you may have.

DISPLAYS

We track about 220 A-4 displays- check out the "Skyhawks" drop down menu on the new and improved web page for a detailed list. TA-4J 153526 is located at the Navy Operating Support Center (NOSC), Tucson, AZ. The last Skyhawk in the bone yard was delivered by Skyhawk Association Director "Buick" Eberhardt and is up for a refresh paint job. Col. Don "Hoot" Duffer, USMC (ret), has championed the volunteer effort to refurbish this display and is keeping us apprised of the ongoing effort.

Up in Brasher Falls, NY, TA-4J 153505 is being reassembled and painted, prior to mounting for dedication and display. James Kelly is keeping us apprised of the ongoing efforts, and he has set a date of Saturday, 9 July, for the dedication.

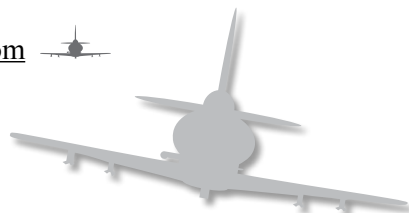
NOTAMS, R&I

- For you data nuts, "Naval Aviation 1910-2010" is on the Naval History and Heritage Command web page (<http://www.history.navy.mil/>). Select Research, then Publications and then Recent Publications to view and/or download Vols I & II.
- Skyhawk Association Winter Board Meeting is set for 31 Mar-3 April, 2016, at the Holiday Inn San Antonio-Downtown-Market Square. Other than the board meeting Saturday 2 April AM, we are planning on some side trips and at least two dinners. Rooms can be reserved by calling 888-615-0725. More details are available in the POD on the web page. Join us!
- Marine Corps Aviation Association (MCAA) Symposium/Marine Aviation Summit 16-21 May, 2016 in New Bern, NC. 703-630-1903 for information or go to www.flymcaa.org.
- Tailhook 2016 September 8-11 at the Nugget in Reno. Get your reservation early: the toll free number is (800) 648-1177, and the main reservation code is GTAIL16.
- Skyhawk Association Annual Meeting/Luncheon 9 September at the Nugget in conjunction with Tailhook. Details to follow.

SEMPER FI,

Jigger

zerocep@ec.rr.com



TAPS



For TAPS lists, members may access these links:
www.a4skyhawk.org/2D/KIA.htm
www.a4skyhawk.org/2E/ops_losses.htm

David M. Boaz • San Diego, CA
 George Cairnes • Unknown
 Edward Graham • Sarasota, FL
 Henry Scott Harrison • Scarborough, ME
 Richard Hawes • Athens, GA
 Hugh Neal Levin • Oceanside, CA
 Francis H. Magee • Lemon Grove, CA
 William F. Sallada • Charlottesville, VA

TAPS notices may be sent to Bob Hickerson, Journal Editor at sa-journal-editor@darw.it or mail to Bob Hickerson, 1222 Balcones Drive, Fredericksburg, TX 78624

TAKE NO PRISONERS

Letters to the Editor

sa-journal-editor@darw.it

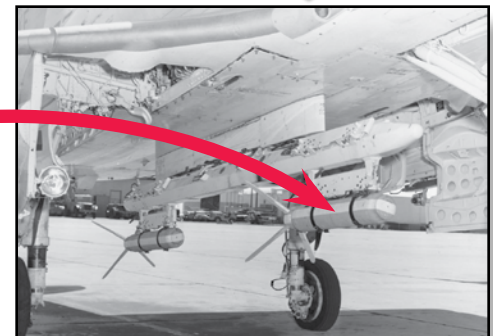
■ Ed. Note: Just before Christmas last year, the Skyhawk Association changed several of our email addresses. Due to that, the address for the Journal editor changed from sa-journal-editor@a4skyhawk.org to sa-journal-editor@darw.it. At the same time, I had trouble with my Outlook software, and together, these two issues basically shut down correspondence to the Journal Editor inbox.

If you wrote to the editorial team during this period, only to receive a message that your email was not deliverable, give us another try. We value your stories and opinions and believe that we are back in business again.

Once again, sa-journal-editor@darw.it is now the active mailbox for input concerning *The A-4Ever*.

■ To the Editor:
 Hi Gary (Verver)

I somehow missed the trivia question in the summer issue, or I would have answered it easily. The reason is that I was the pilot who dropped those Deneyes from THAT airplane THAT day. I know this sounds fishy, so I have enclosed a copy of one of three of my pilot's logbook pages for June, 1962. Those were the days - 40 hops in one month! The correct BuNo is 142892 and it was one of the workhorse A-4's in our stable. Much of our work was in the development of the eye-series weapons (Sadeye, Gladeye, Snakeye, Walleye, Rockeye, Deneye & more) plus the new streamlined MK-80 series bombs and the Shrike anti-radiation missile.



Oh yes -- as to your current trivia question. It looks to me like the expanding rod warhead used in (I believe) the AIM-9 Sidewinder. Thanks for your work on A4'S Forever CDR D.D. Smith, USN (ret) Oceanside, CA [ddanjo@sbcglobal.net]



Send your letters to
sa-journal-editor@darw.it

MEMBER'S MOVIES



Skyhawk Association YouTube Channel

<https://www.youtube.com/user/A4SkyhawkAssociation>

Association Website Video Page <http://a4skyhawk.org/content/association-videos>

Navy Air Strike **NORTH VIETNAM**

By VICE ADMIRAL ROBERT F. DUNN, U.S. NAVY (RETIRED)

This article was first published in Naval History magazine, December 2015 issue. Used here with permission.

NATIONAL ARCHIVES

Prior to a 1966 Operation Rolling Thunder mission, a catapult officer on board the USS *Enterprise* (CVAN-65) gives the “go” signal to an A-4C Skyhawk armed with a Bullpup missile. Between 1965 and 1968, Navy aircraft flew more than 130,000 attack sorties against Rolling Thunder targets in North Vietnam.

Dodging SAMs by pulling high ‘Gs,’ and weaving and jinking to avoid antiaircraft fire were key survival skills for the pilots of Operation Rolling Thunder—the three-and-a-half-year campaign to force Hanoi to the peace table.

A half century has gone by since Rolling Thunder broke over North Vietnam. Frustrated by continual attacks against American installations in South Vietnam and the increasing support of Viet Cong in the South by the communist regime in the North, the Johnson administration decided to take action. An air campaign designed to apply slowly increasing pressure on North Vietnam by moving attacks farther and farther north was ordered, a campaign to be executed gradually, like a line of thunderstorms advancing across the countryside—thus, Rolling Thunder.

Success would be achieved when the offensive forced the North Vietnamese to meet at the negotiating table and stop supporting the Viet Cong. U.S. Air Force, Navy, and Marine airmen flying from bases in Thailand and South Vietnam and from aircraft carriers in the Gulf of Tonkin were to apply that pressure in the North by disrupting supply routes and destroying resources that facilitated aggression in the South. Specific targets included electric power, war-supporting industry, transportation, military complexes, petroleum storage facilities, and air defenses.

Unfortunately, the campaign was compromised and circumscribed by unprecedented micromanagement emanating from the White House and the Pentagon and relayed through the cumbersome chain of command to the pilots and aircrews trying to do their jobs in the actual theater of war. At the start of the campaign, prohibited bombing zones were established around Hanoi and Haiphong, within 25 to 30 miles of the Chinese border, and in other areas. There was also a requirement for specific approval from Washington and the commander-in-chief, Pacific, in Hawaii to strike individual targets above the 19th parallel, which was about 175 miles north of the Demilitarized Zone separating North and South Vietnam.

Most aircrews were not particularly discomfited with such rules. That was more a bother for commanders. Flying one or two combat flights each day, the aircrews on the line had enough to do with the missions available. It was the weather that more directly affected them. During long periods of the year, November through March, monsoon-driven fog and overcast precluded visual strikes, and the only truly all-weather aircraft, the A-6 Intruder, was just making its first appearance. In these frequent bad-weather periods the North Vietnamese had ample opportunity to rebuild roads and bridges, replenish munitions, and send support south.

Initial Attacks to Alpha Strikes

Southeast Asia was not entirely new to American airmen. In 1955 a Marine unit delivered AD Skyraiders to the French in Da Nang for use against the Viet Minh insurgency, and in the later 1950s there were reconnaissance flights from carriers, by Navy patrol planes operating from the Philippines, and by the Air Force. In 1960 a Navy group was

continued...

established in Saigon to train the South Vietnamese in the Skyraider. Then in 1964, in response to the Gulf of Tonkin Incident and other aggressions, U.S. aircraft flew several retaliatory strikes.

In April 1965, Rolling Thunder officially commenced with attacks on targets in southern North Vietnam by Air Force planes flying from their shore bases and by Navy aircraft flying from Task Force 77 carriers operating in the Gulf of Tonkin—"Yankee Station." Soon thereafter "Dixie Station" was established off the coast of South Vietnam, a

increased other air defenses; reconstructed and improved roads and bridges; put most of their petroleum, oil, and lubricants (POL) storage underground; dispersed their military-support base; and sent increasing amounts of matériel to South Vietnam via a winding route through mountains and jungle along the Laotian border that came to be known as the Ho Chi Minh Trail.

Aircrews were the unwilling beneficiaries of all this when Rolling Thunder operations resumed on 31 January 1966. Although there was a plethora of targets, such as newly

first half of 1966, very few large "Alpha," or "Alfa," strikes were flown, but that began to change at the end of June.

On 29 June, Task Force 77 aircraft hit the Haiphong POL, up to that time out of bounds. Results were spectacular. Fireballs lifting from the exploded tanks were caught on camera and the photographs published in *Newsweek*. Smoke rose to 20,000 feet. That success seemed to break the ice with the authorities in Washington, and from then on an increasingly higher percentage of Task Force 77 effort was in the form of Alpha strikes—large multi-plane, often full-deckload, efforts

Defenses and Countermeasures

North Vietnamese opposition mostly consisted of AAA—lots of it. While generally increasing in intensity as one got closer to Vinh, Thanh Hoa, Haiphong, or Hanoi, it could be expected everywhere. Every peasant, it seemed, had a gun. Artillery from 12.7-mm to 105-mm abounded. Aircrews could tell which kind it was by the color of the bursts—black for 105-mm, white for 88-mm, a stream of tracers for 12.7- and 35-mm—and countered it when they could by weaving and jinking. Over some

targets the flak was so thick it looked like newsreel scenes of World War II B-17 raids on Berlin. The only choice was to press on . . . and there is no record of anyone ever turning back. The smaller the caliber, the greater the rate of fire, and the 12.7-mm tracers coming up, especially at dusk, looked like a stream from a garden hose. Sometimes larger aircraft standing off from the action could jam targeting radar, but the best defenses against the flak were to stay high until close to the target and to weave and jink continuously while over land. Still, more Navy and Air Force aircraft were lost to flak than to any other North Vietnamese defensive system.

SAMs were always a concern but not a real problem until mid-1966. By the middle of



NATIONAL ARCHIVES

The fast pace of Rolling Thunder operations kept ordnancemen on board "Yankee Station" carriers busy. Above: Against the backdrop of a line of F-4B Phantom II fighters, *Constellation* (CVA-64) "red shirts" wait to load Snakeye bombs and LAU-10 Zuni rocket pods on strike aircraft for a 1966 mission. Right: Straining ordnancemen on board the *Oriskany* (CVA-34) attach Snakeyes to an A-4C wing pylon. Afterward, fuses would be screwed into the bombs' noses.



point from which assigned carriers launched air support for ground forces fighting the Viet Cong in the South.

Both the bombing of North Vietnam and air support for troops in South Vietnam continued for the rest of 1965, the former evermore constrained by rules guided by the belief that by applying gradual military pressure "We can get the signal through to convince North Vietnam to stop attacking its neighbor." When that didn't seem to work, the United States attempted to bring Hanoi to the peace table by using a different tactic: A bombing halt was declared over the Christmas season of 1965. That also failed.

It did work for the North Vietnamese, however. During the pause they installed new antiaircraft artillery (AAA or flak) and surface-to-air missile (SAM) sites; improved and

reconstructed roads, bridges, and storage sites, on the minus side there was more intense flak on almost every mission and as time went by more and more SAM sites were built. Also, the mission had subtly changed. No longer was the goal merely to encourage the North to negotiate; now it was interdiction to shut off the supply of men and matériel to South Vietnam. Operations, however, were still mostly restricted to the southern half of North Vietnam, and most Navy missions continued to be flown in connection with cyclic operations; that is, a launch and a recovery every 1.75 hours within a 12-hour flying day for each ship. To effect more complete coverage, flying days were staggered among the several carriers on station so that there would be some effort over North Vietnam at all hours. In the

against POL, electric-generating stations, bridges, storage sites, missile emplacements, and a few smaller airfields.

When Alpha strikes weren't tasked or the weather closed in, road and waterway reconnaissance, searching out traffic, truck parks, moving barges, and bridges continued. When all else failed, ordnance was used on not-very-effective road cuts.

None of this pushed the North Vietnamese to the negotiating table. They were dug in, determined, and resilient. Though aircrews were also determined, they more and more came to the realization that "We aren't going to end this war by catching Ho Chi Minh under a manhole cover." (When the air-raid sirens sounded in urban areas, many North Vietnamese would climb down manholes to seek shelter underground).

Nevertheless, aircrews pressed on. Aircraft continued to fly "over the beach" and deliver ordnance as directed despite the losses of too many friends and shipmates.

1967 as many as 80 SAMs would be launched against just one strike. While some aircraft were indeed lost to them, their more lethal effect was to drive the attacking planes down into the AAA envelope as they maneuvered to evade the missiles.

When Navy carrier aircraft first deployed to Southeast Asia they had no specific defense against SAMs other than what the pilots called "The Mark 1 Eyeball" and maneuver. Everyone was well aware that electronic warfare (EW) was the key to defense against the missiles, but without any such defenses on board attacking aircraft, their pilots had to depend on remotely stationed EW aircraft such as the EA-3B Skywarrior operating from the carrier, the Marine EF-10B (later the EA-6A) operating from Da Nang or Chu Lai, or U.S. Air Force aircraft. These were standoff platforms and advisory in nature. Active on-board defense was needed, and fortunately bright people back home knew the problem and came up with quick fixes.

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Even while deployed, new electronic warfare (EW) systems were installed that proved their worth almost immediately. Aircrews now received both a visual (a red light on the instrument glare shield) and an aural warning when either a SAM or AAA radar was active. Another kind of warning sounded when a SAM was tracking, shifting tone when the pulse repetition rate changed. This was paralleled with a strobe on a small cockpit-mounted scope showing the direction the SAM was tracking. Thus there was afforded an opportunity for maneuver and evasion. Also, an automatic feature on board aircraft spread the radar blip on an enemy launch team's weapons-tracking radar, thus complicating the AAA gunfire solution. Once the aircrews gained confidence in these systems, no one wanted to go over the beach without them. Nevertheless, with or without AAA and SAM warning, as soon as any aircraft crossed the beach, jinking and weaving would begin.

Aside from maneuvering and on-board EW equipment, the AGM-45 Shrike anti-radiation missile carried by specially equipped A-4, A-6, and, later, A-7 aircraft proved effective. The Shrike was designed to take out a SAM battery's guidance radar. Very often a radar operator detecting a Shrike would shut down his equipment, causing a miss—not as good as a kill, but okay. Without the radar the SAM wouldn't guide and the strike group could get in and out of the target area with either no missiles launched or SAMs launched without guidance. Very soon special two-plane sections of A-4s (later, A-7s) with Shrikes, called "Iron Hands," would accompany each strike

A third concern for attacking aircraft, much publicized but not nearly so lethal, were North Vietnamese MiGs—MiG-17s and MiG-21s. They did not oppose many strikes, and Navy attack aircraft never considered them a major threat because they never disrupted a carrier-plane strike. Navy fighters—F-4 Phantom IIs and F-8 Crusaders—looked for them and did shoot down some. To them goes the credit for keeping the MiGs that did show themselves off the backs of attack aircraft.

To each squadron any loss was heartbreaking, but overall, despite the heavy defenses, losses to enemy AAA, SAMs, and MiGs were not catastrophic and never compromised performance on the part of the rest of the aircrews. When a loss did occur, perhaps two to three per squadron per cruise on average, shipmates would fill the gap until a replacement arrived from home and a new aircraft could fly out from Cubi Point in the Philippines. Morale in individual squadrons remained high.

Hitting Northern Targets

Strike tactics would vary a bit among air wings, but rendezvous after launch generally would be over the carrier with separate altitudes for different squadrons. Once the

group assembled, the strike leader would head toward the "coast-in" point and the fighters would take on fuel. The main body of the group—the attack aircraft—would cruise in loose formation at about 14,000 feet, the fighters weaving to maintain a good cruise speed and slightly above and behind. Nearing the coast, the leader would initiate a gentle weave, back and forth and up and down. In the event of intense flak or SAMs, the weave would become



COURTESY OF THE AUTHOR

Of North Vietnam's air defenses—fighter aircraft, surface-to-air missiles, and antiaircraft artillery—the last, AAA, was by far the deadliest. During the author's 1967 deployment, antiaircraft gunners shot down 7 of his air wing's planes and damaged 53 others—including his own A-4C (left), which was hit while on an armed reconnaissance mission.

A Routine Strike

Approaching North Vietnam from the southeast, from Yankee Station in the Gulf of Tonkin, the coastline looms dull and flat through the haze. Huge gray streams looking like ribbons of silver flow toward the sea from the northwest. Rice paddies filled with placid black water spread from the meandering rivers. Here and there a clump of trees and a covey of dwellings mark a village, a church spire rising. Dike-roads connect the tree clumps. A railroad devoid of traffic riding a levee slashes across the waterscape.

In the far distance, silhouettes and shadows of mountains rise up. To the right sprawls Haiphong, its waterfront crowded with fat freighters. Dead ahead lies Hanoi. Closer at hand, just off to the right, is your target.

Crossing the coastline the adrenaline begins to pump; the jinking begins. The fighter flak suppressors move ahead. You

more vigorous. Approaching the target, the group would begin a gentle descent, still weaving, to reach about 12,000 feet at the roll-in point.

A few miles before reaching the target, the fighters (assuming there were no known MiGs in the vicinity) would accelerate ahead to roll in on the target's gun defenses, dropping their bombs, generally four 500- or 750-pounders with variable-time fuses, two set high and two set low, to detonate just as the attack aircraft were rolling in on the main target. The attack aircraft rolled in immediately behind the fighters, attempting to achieve a 50-degree dive and a bomb release at 5,000 feet. All attackers endeavored to be out of their dive by 2,000 feet and banking hard to the pre-briefed retirement direction, generally toward the coast. Strike aircraft would then make a running rendezvous by sections (two aircraft) and head for the water. Once "feet wet," aircraft would check one another for hung ordnance or battle damage. Happiness was being overhead the ship followed by landing, the intelligence debrief, and a hearty snack in the wardroom.

Before 1967, or when the weather was too unfavorable to hit the primary target, secondary targets in better weather areas—usually in the more southern part of North Vietnam—were

double-check your navigation, check on your wingman, check your armament switches. Press on.

One of the fighters calls, "Flak at ten o'clock!" You see just a few puffs slightly low, no sweat. Then another call: "Missile lifting at two-thirty, just by the bend in the river." You're lucky. You see this one—first a cloud of dust at the launch point then a long, orange flame rising ever so slowly up and toward the strike force. You maneuver to keep it in sight. Pulling hard you look for launches two and three. Seldom do they fire singles.

SAMs pass clear, exploding astern in great orange puffs. A section of the strike group is detached to hit the launch site.

The target area is alive with sparklers—muzzle flashes from what seems like hundreds of guns. As you get closer, the flak begins in earnest. Black puffs, white puffs, gray puffs. It's so thick you feel that your plane is being bounced around by

attacked. In these instances, targets would be assigned to four-plane divisions, and if the mission was some sort of reconnaissance, road reconnaissance say, tasking would devolve to two-plane sections. For such missions, one aircraft would scout low while the other remained high, ready to dive and attack any fleeting target the low plane may have spotted.

Each strike and each cycle of combat operations was supported by a number of other units. On larger strikes an RA-5C Vigilante would make a pass over the target immediately after the strike group departed to take photos for battle-damage assessment. At least one E2 Hawkeye would be airborne to coordinate tanking and search and rescue (SAR) should that be necessary. One or two KA-3 Skywarriors would be available for tanking, routine to extend the range of fighters and emergency for any battle-damaged aircraft. Several helicopters were airborne from the carrier, other supporting ships, and frequently the Air Force for rescue, sometimes far inshore. During large strikes, Marine EF-10B Skyknights, and later EA-6A Prowlers based in South Vietnam and Air Force early-warning aircraft based in Thailand, would assist. Then, in the northern Gulf of Tonkin, a pilot information and radar advisory zone (PIRAZ) cruiser or guided-missile frigate would broadcast MiG warnings, advise when aircraft were getting too close to the Chinese border, and assist in SAR with their on-board helos and radar vectors.

Action Down South

Not all of the Navy's air effort was over North Vietnam. Task Force 77 maintained one carrier at Dixie Station, a point in the South China Sea on about the same latitude as Saigon, from which air support was flown to friendly forces in South Vietnam. From

continued...

detonating shells. There's really only one thing to do: roll in on the target.

Roll nearly upside down, pop speedbrakes, pull through to the desired bomb line and target angle, level your wings with the gunsight on the center of the target, and set up a steady dive. Seven thousand feet. Correct for drift. Six thousand feet. Tracers are thickening. Five thousand feet. Pickle!

Pull hard! Roll left. Full throttle. More white puffs. Jink, and jink some more. Suddenly you're clear; throttle back a bit, check in the mirror. Your wingman has stuck close, and glancing back they look like good hits. What a relief to head for the coast. Happiness is "feet wet" over the Tonkin Gulf. The last of the flight checks in feet wet; nobody missing, nobody hit, the bridge is down.

One more successful strike.

—Vice Admiral Robert F. Dunn, U.S. Navy (Retired)



LEFT: YANKEE STATION (CONSTELLATION 1967 CRUISE BOOK); CENTER: NATIONAL ARCHIVES; RIGHT: U.S. NAVAL INSTITUTE PHOTO ARCHIVE

Left to right: *Constellation* A-6A Intruder and F-4B Phantoms strike aircraft set out on a Rolling Thunder mission. Bombs from a Skyhawk fall toward the Troung Quang Tin railroad bridge during a strike over North Vietnam, and an A-4 pulls up after dropping its load of bombs on an airfield and revetments outside Haiphong. While morale among Navy aviators generally remained high throughout Rolling Thunder, in the end micromanaging Washington planners greatly underestimated North Vietnamese resilience and the campaign failed.

aircrews' perspective, the South was a very permissive environment with only occasional small-arms fire—"a piece of cake." The assigned carrier was usually new to the theater or one just coming out of R&R, and the missions were a kind of warm-up for the bigger show at Yankee Station. Later, some Dixie Station missions were actually flown from Yankee Station.

Weapons included napalm for use against bunkers, cluster bomb units (CBU) for structures, 500-pound bombs against training areas or troops in the open, and 1,000-pound bombs with daisy cutters for clearing helicopter landing zones. In the event the forward air control (FAC) had been fired on, 20-mm cannons might be used.

The main hazard over the South was congestion caused by so many aircraft in the vicinity of any one target. Often two simultaneous patterns would be over the same target, one working clockwise, the other counterclockwise. For the aircrews, which were delivering their ordnance against targets they often couldn't see, there was no "psychic income," as there was against most targets up north, where when a bomb was dropped or missile fired something usually blew

up. None of the above, by the way, should be confused with close-air support missions flown later in the war in support of Marines on the ground in the I Corps area. Those missions were anything but a warm-up.

Carriers, Aircraft, and Morale

Throughout Rolling Thunder the Navy kept three to four carriers on station. Their capabilities ranged between the *Enterprise* (CVN-65), the largest carrier then sailing, to a number of World War II-vintage *Essex*-class carriers with the "27 Charlie" and 127 modifications: angled deck, steam catapults, and the optical landing system. Fighters on the larger ships were F-4 Phantom IIs, while F-8 Crusaders flew from the 27Cs. Light attack aircraft were the A-4Bs, Cs, and Es until late in 1967 when A-7 Corsair IIs began replacing them. Some ships flew A-4s until the end of the war, however. Medium-attack A-6 Intruders deployed as early as 1965 but only on board the larger ships and then only with a lot of growing pains. Once problems were sorted out, they became a mainstay, especially at night and in bad weather. First flown in 1948, A-1 Skyraiders deployed on board Task

Force (TF) 77 ships throughout Rolling Thunder but were gradually replaced by Intruders on board larger carriers. Smaller carriers continued to carry Skyraiders until the end of the war, albeit they were used almost exclusively in-country and for SAR.

To keep three to four carriers on the line, at least seven had to be deployed. In addition to the four, one of the other three would be at Cubi Point, one at Hong Kong and one at Yokosuka, Japan. The latter had the only real ship repair facility in the western Pacific, with an aircraft repair facility close by, although lighter maintenance and less extensive alternations could be effected in Cubi as well. As for crew liberty, no one seemed to complain about any of the three ports.

By and large, morale was good throughout TF 77, especially among the aircrewmembers who were doing what they had been trained to do. There were a few who left when their obligated service was complete, but by and large they never flinched from their duty while in TF 77. Only a very few aviators decided that air combat was not for them. Their reasons were many and varied, but unrest and student demonstrations at home seemed to be least among them. As for "Hanoi Hannah" and her radio broadcasts, we thought they were uproariously funny.

What was not so funny were the constraints put on those who flew over North Vietnam. While proceeding to a target on a clear summer day with good visibility, it was

tough to see fat freighters lying at the piers in Haiphong and not be able to hit them. The supplies offloaded soon would be going down the Ho Chi Minh Trail by truck and backpack to support the Viet Cong, and U.S. aircrews would be expected to ferret them out in bits and pieces somewhere in a mountainous and canopied jungle. It was tough knowing that SAMs and other ordnance were arriving from China but striking them wasn't allowed within the buffer zone along that border. It was tough only to be allowed to hit the targets approved in Washington, even though, admittedly, there were otherwise enough targets go to around.

Rolling Thunder ended officially on 1 October 1968, but strikes below the 19th parallel continued at a less intense pace until 1972, when President Richard Nixon initiated

continued...

Operation Linebacker I. That was followed by Linebacker II—the 1972 “Christmas Bombings” of Hanoi—which finally drove the North Vietnamese to the Paris negotiating table and eventually allowed TF 77 to retire from the Gulf of Tonkin.

Much has been written about the micromanagement of the air war, but for those on the line flying one and two missions a day, though frustrated with bombing restrictions, that fight was left to TF 77 seniors in Saigon and Hawaii. It was only with the outcome of the Hanoi Christmas Bombings that what might have been became apparent.

Then and Now

All of that is behind us now. With only ten carriers in the entire fleet, we probably never again will see as many of the ships in one theater as we did in the Gulf of Tonkin. On the other hand, during the Vietnam War weaponeers would calculate how many bombs it would take to destroy one target. Now it's the number of targets that can be destroyed with one aircraft's weapons load. Massive Alpha strikes are a thing of the past. Except for the A-6, night and bad-weather flying over North Vietnam was more of a hazard than flak, missiles, or MiGs. Flying combat in all weather is now routine and expected.

So what did Rolling Thunder accomplish? Not so much. A lot of ordnance was expended, vast quantities of materials of various sorts were used up, and hundreds of aircraft were lost to both operational accidents and combat. Air Force and naval aviators lost their lives by the score, and hundreds more became prisoners in Hanoi. Nevertheless, all those who flew and all those who supported them expected to be victorious in the American tradition; they were cheated out of that by misguided direction from Washington and increasing lack of support from politicians, friends, and neighbors back home.

Because of Rolling Thunder overspending and over-deployment, elsewhere fewer ships could get under way and fewer airplanes could fly. Readiness paled. Yet squadron department heads, flight leaders, and squadron commanders of Rolling Thunder stuck with it. They became the leaders of the Navy that recovered from that low point and did such outstanding work in the Gulf War. The Vietnam War was a huge price to pay, but at least those who were there can look to later success as a modicum of payoff.

May the politicians and leadership of the future do better. ⚓

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- John B. Nichols and Barrett Tillman, *On Yankee Station: The Naval Air War Over Vietnam* (Annapolis, MD: Naval Institute Press, 1987, 2013).
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- ADM Ulysses S. Grant Sharp Jr., USN (Ret.), *Strategy for Defeat: Vietnam in Retrospect* (San Rafael, CA: Presidio Press, 1978). Admiral Sharp was commander-in-chief of the Pacific Command from 1964 to 1968.
- John Schlaight, “A War Too Long,” part 1, *Air Power History*, Air Force Historical Foundation, vol. 62, no. 2 (Summer 2015).
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PROJECT SHOEHORN

By Peter Onksen

In August of 1965 an ECM project was assigned to the Weapons Systems Test Division of the Naval Air Test Center. In Vietnam the Soviets had introduced the SA-2 Guideline Surface to Air Missile (SAM) system in North Vietnam. CDR/CAPT Julian Lake (OPNAV-352) had been an advocate of ECM, and along with a field service engineer from Sanders Associates, Inc., traveled to Douglas Aircraft Company with a Sanders AN/ALQ-51. The ALQ-51 was an “S” band deception ECM system. At Douglas they investigated how and where the ALQ-51 could be fitted in an A-4 Skyhawk. It was decided that the only location was where the Skyhawk's 20 mm ammunition was stored. The ALQ-51 was “shoehorned” into the A-4.

In Mid-August of 1965, two Field service engineers, one from Sanders and the other from Douglas arrived at WST with an ALQ-51 and all the required installation parts: control box, antennas, foam-filled coax transmission lines, and other bits and pieces. A Service Test Division A-4 was selected, and the ALQ-51 was installed using the WST civilian-operated sheet metal shop and Navy enlisted mechanics. The sheet metal shop designed flight worthy installation parts for the installation.

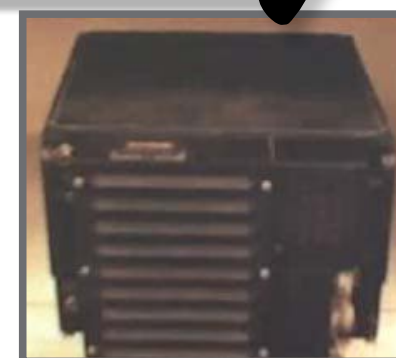
I was an ECM Naval flight Officer (NFO) assigned as the project officer; LT Pat Cornelius was the project pilot; Larry Emery was the civil-servant engineer; and a Navy plane captain completed the test team. Within a week or so after the beginning of the installation, the team traveled to Nashua, New Hampshire, where Sanders was located. The plane captain with all the A-4 ground support equipment was flown to the Manchester Airport in a C-130.

Sanders had a simulated SA-2 guidance radar (Fansong) called the Flintstone at their Merrimack test range. There was also an “S” band AAA radar similar to the Soviet Whiff/Firecan and a Nike Ajax “X”

band tracking radar used as a reference to determine any errors generated in the Flintstone and AAA radar by the ALQ-51.

The goal of the flight tests was to determine the effectiveness of the ALQ-51 installation in the A-4. Along with Sanders personnel, the team made the flight test plan. As Pat flew the A-4, Peter and Larry were in the van where the Flintstone operators were located.

The ALQ-51 was designed to break the lock of conical scanning tracking radars, such as the AAA Whiff/Firecan radar, and the installation in the A-4 operated as designed. Sanders had modified the jamming program to jam the track-while-scan dual radars on the Fansong. The flight tests were flown at various altitudes and at various angles to the Flintstone. The Shoehorned A-4 Skyhawk forced the radar operators to manually track the A-4, and this caused sufficient errors in the tracking to warrant installation of ALQ-51 in all



AN/ALQ-51

Tonkin began flying into the O-and-R facility in the Philippines for the Shoehorn installation.

Project Shoehorn continued at WST with ALQ-51's being installed in the F-8 Crusaders and F-4 Phantoms. Each aircraft had its own test team; however, as new ECM equipment was added to Shoehorn, the original team of myself and Larry Emery was involved in the test and evaluation. One of the very important modifications to the ALQ-51 was possible due to the results realized by the installation of an ALQ-51 on a USAF Ryan Firebee reconnaissance drone (Model-147F). The drone survived multiple SA-2 missiles launches which resulted in the interception of the Fansong radar guidance signal that indicated pre-launch and missile guidance warning, aka the “Launch Alert Receiver.”

It should be noted that the AN/ALQ-51 was also installed on the A-3Bs, along with the “X” band version, the AN/ALQ-41. The A-6 Intruder also had the two ALQs as original installation equipment. Later, the A-6 and the A-7 Corsair II light-attack aircraft (replacement for the A-4) had the ALQ-100 (“S” and “C” bands) as original equipment because of the Shoehorn success.

(Ed. Note: Then LT Peter Onksen was a Naval Flight Officer assigned to Weapons Systems Test at Pax River in the 1964-1967 time frame. He was assigned as the project officer for Project Shoehorn, the test and evaluation of the ECM equipment, AN-ALQ-51, which was installed in the A-4.)



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Join or renew, and give someone a one-year gift membership for \$20 more.

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Riley, John D. – Santa Maria, CA
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Thumm, Michael – Lexington Park, MD

Skyhawks Still Flying

Dateline: February 2016 Update
Hun reporting

Background: Out of some 2960 A-4 aircraft produced by Douglas Aircraft, just how many are still flying around the country and the world? As the principal record keeper and contact maintainer for the Skyhawk community, it seemed pretty logical that the Association be the one to keep the count of 'still flying'. So here we are, some 64 years after the initial government contract was awarded (June 1952), 62 years after Bob Rahn made the first flight (June 1954), and, as you'll find below, there are **almost 50** Skyhawks still performing with speed and agility all over the world! It's been a fine flying machine indeed! We'll keep the report's organization the same—militaries still flying, then contract services, private collections, and a final section on legacy operators, those no longer employing our A-4.

Military: Despite its age, the Skyhawk is a highly capable airframe, as you all well know. It's very good at missions not requiring supersonic speeds and advanced radars and avionics, although some users have refitted their Skyhawks with formidable upgrades. Its main advantage from a government point of view is its cost. Two militaries still operate the A-4, and a total of about 13 single-seaters and 4 two-seaters are currently flying in their service.

Israel: We lost our preeminent international Skyhawker military this past year. The IAF retired their last A-4 Skyhawk in December 2015 and has their well-maintained inventory up for sale. They are quite pleased with their Aer-macchi replacements, but our brother Skyhawkers share our sense of a "great disturbance in the Force" as we lose the IAF Skyhawks. These pictures of the retirement ceremony were graciously provided by the famous Israeli aviation photographer Yissachar Ruas.

O A-4s still flying



Argentina: Argentina's Air Force and Navy at one time operated close to 100 A-4Bs, but retired those older airframes in 1999 after getting up to speed on their 32 A-4Ms and 4 OA-4Ms purchased from the US government in 1994. Their redesignated A-4ARs and OA-4ARs are still operating in their 5th Air Brigade, although at much reduced numbers due mainly to budget, parts and maintenance difficulties. I credit them currently with 6 single-seat and 1 dual-seat flyers, with another 12 close enough to being flyers to call them "operational reserve." **6 A-4AR/1 OA-4AR**



Brazil: The Brazilian Navy became a Skyhawk operator when it acquired 20 A-4KU and 3 TA-4KU aircraft from the Kuwaiti government in 1998. Re-designated AF-1 and AF-1As, these aircraft operated off the Brazilian Navy's modernized French aircraft carrier *São Paulo*, and a select dozen were picked to receive a major upgrade program to be conducted by Embraer from 2009 to 2015. The upgrade program (and the *São Paulo's* readiness update) has been slow, but the new aircraft are now appearing on the flight line as AF-1Bs and AF-1Cs, with 4 modernized aircraft available for operations. Best guess? These four and possibly 3 more original AFs available for proficiency flying. **3 AF-1B/1 AF-1C and 2 AF-1/1 AF-1As**



Contract Services: I don't remember having contract air services around while we served, but these days are different. With op tempo as high as it is, the airlines hiring, and current airframes being really expensive, it has become cost effective for the government and industry to contract out many air support requirements. Voila! Over the past dozen years, many outfits have appeared with airplanes and crews ready to tow targets, act as cruise and anti-ship missiles, run air



62 Years and still going strong...

refueling evaluations, and even provide close air support to government and industry users. Lately, the missions being contracted out even include "Red Air!" Throw us into THAT briar patch any day! There are four contract services which utilize the Skyhawk to provide air support, and some 22 single-seat and 6 TA-4s are currently flying/available in their service. Most of these aircraft "aren't your Daddy's Skyhawk." Check out some of the cockpits for starters...



Draken International: Draken International, headed by Mr. Jared Isaacson, got into the A-4 business in 2012 when it put the finishing touches on the purchase of 8 well-preserved New Zealand A-4Ks, 6 single-seaters and two TA-4Ks. (See the Association's *A-4 Ever* Fall 2014 issue). These very upgraded Skyhawks have P-8 engines and glass cockpits. Then at the end of 2014, they bought 6 A-4Ns from BAE Industries (in Germany) which were destined for the boneyard due to a lost support contract. Draken now has a very substantial air force in Lakeland, Florida, that includes these A-4s and a mix of 15 assorted Aer-macchi MB-339s, L-39s and a T-33, all flying. Further, 26 crated MiG-21s are on site, awaiting need, and 28 L-159s have been purchased and/or awaiting delivery! Amazing, no? **6 A-4Ks and 6 A-4Ns/2 TA-4Ks**



Discovery Air (Canada): Discovery Air operates a wide-ranging fleet of aircraft for contract services and supports the Canadian Armed Forces through its Discovery Air Defense Services (DADS) unit, also known as Top Aces, USA. In December 2013, they completed the acquisition of ATSI of Mesa, AZ, which included their 7 A-4Ns and 3 TA-4Js. DAD's also maintains a fleet of Dornier Alpha Jets, Westwind 1124s and is "quite well advanced" in talks for the acquisition of F-16 aircraft. Look for them to be in the hunt for US contracts to add to their new contract with the German Air Force at Wittmund, Germany. **7 A-4Ns/3 TA-4J**

Teton Aviation Services: This contract air service has available about 10 privately owned aircraft ranging from MiGs to a Citation, and owner Dr. Rich Sugden has recently brought TA-4J 154306 into flying status. First flight was in early November 2014, and Rich is hoping to find seat pyro soon to make the flying a bit more comfortable. **1 TA-4J**



A4L LLC: This outfit acquired 9 of the Malaysian 'parts aircraft' in Arizona and has brought several of them into service under contract as orders have come in. They have leased aircraft to both ATAC and Draken (above right) in the past and have 3 flyers in Denison, TX. One or two more could be flying fairly soon after being contracted, with those spread through restoration facilities in Perryville, MO, Sherman, TX, and Bill Maszala's storage facility, ATW Aviation, Inc., in Marana, AZ. **3 A-4L**

Private Collections: It's good to be well established financially, if you want to own a Skyhawk! Currently 5 flyers are in private hands, 3 TA-4Js, an A-4C and an A-4B. One TA-4J and the A-4C are for sale! And "Maj" McDougall has an A-4C "within a year" of flying...!

Collings Foundation: Dedicated to preserving "the heritage of the sky," this perhaps most well-known vintage aircraft foundation operates some 18 flying historical aircraft and maintains several more for display. Its TA-4J, N524CF, is often seen at the most popular air shows around the country. With FAA certification to fly back-seaters returning, you too can fly again...for about \$7500. **1 TA-4J**



continued...

Skyhawks still going strong.... continued

Warbird Heritage Foundation: Has a similar mission as the Collings Foundation. It operates close to a dozen heritage warbirds in air shows and appearances around the country. Its A-4B, N49WH, is actually owned by Mr. Paul Wood and first flew in late 2009. It is also used as a Navy Legacy Flight warbird demonstration aircraft. **1 A-4B**

Pacific Aero Ventures, LLC: Privately owned by Don Keating, this beautifully restored TA-4J (by Mike McDougall of Fighting Classics Restoration) is a fairly recent (2010) addition to the flying Skyhawks. Don has parts for possibly 2 more A-4's for Mike to work on once he sells this N518TA beauty, currently on display at Marana, AZ. If I only had \$2-3 million.... **1 TA-4J**



Valiant Air Command War Bird Museum: Skyhawk Ventures, LLC owners, Porter Spangler and Dan Carr and their team, worked hard getting this hybrid 'C' ready to go for its first flight in August 2011. It flew extensively for the next 2 years. However, the aircraft was sold in 2014 to the Valiant Air Command War Bird Museum at Titusville, FL. It is expected to be maintained as a flyer (and is also listed for sale on many sites). Worthy of note...Skyhawk Association Director Dave "Hide" Dollarhide is a primary flyer! **1 A-4C**

Classic Fighters: This Skyhawker "new boy on the block" is owned and operated by Doug Matthews, and his TA-4, 156925, joins an aircraft stable which includes a P-51, 2 F-86s, 3 Marchetti S211s, an F4U Corsair and a T-33. First flight was in the Fall of 2015. **1 TA-4**



Legacy Skyhawker Operators: Militaries... Out of the 2960 A-4's built, the vast majority of them saw service, of course, with the U.S. Navy and Marine Corps. First delivery went to the Navy in September of 1956 and two

days later the Marine Corps started getting theirs. The USN operated some 110 different squadrons of Skyhawks, including training squadrons, with the A-4 coming off front-line duty in 1975, while continuing operations in the training command, the reserves and, finally, with the VC squadrons until VC-8 was deactivated in May 2003. The USMC operated some 49 various squadrons (32 VMAs) of Skyhawks with them coming off front-line duty in February 1990 (VMA-211) The Marine Corps reserves operated the Skyhawk until June 1994 (VMA-131).

The International pipeline started in late 1966 with Argentina getting delivery of reworked A-4B's. International deliveries of brand new A-4s started in July 1967 with Australia receiving their first A-4Gs in that month, followed in that December by Israel receiving their first A-4Hs. Malaysia, Singapore, Indonesia, Kuwait and New Zealand also flew Skyhawks. The Kuwaiti A-4Ms are now being used by Brazil and New Zealand's A-4Ks now work for Draken. Singapore shut down their last A-4 (training) squadron in December of 2013. Canada and France gave the Skyhawk serious consideration, but never initiated Skyhawk buys. In December 2015, our preeminent international Skyhawk military operator, the Israel IAF, finally retired its last Skyhawks.

Contract Services: ATAC, based in Newport News, VA, flew A-4Ns and A-4Ls until 2013; BAE Systems flew A-4Ns (now with Draken) under contract with the German government until December 2014; ATSI of Mesa, AZ, was purchased by Discovery Air in December 2013, and its Top Aces now operates that A-4 fleet; TADS of Carson City, NV, flies contract support, but no longer has A-4s in its inventory.

A-4's Flying:	Single Seaters	Two Seaters
Military:	11	3
Contract:	22	6
Private:	<u>2</u>	<u>3</u>
Totals:	35	12

Grand Totals: 47 Flying Skyhawks, February 2016

A-4's Still Flying!
as of February 2016

14 Military
28 Contract
5 Private
Total: 47



Read?

you think
we read?

FACE THE TIGER

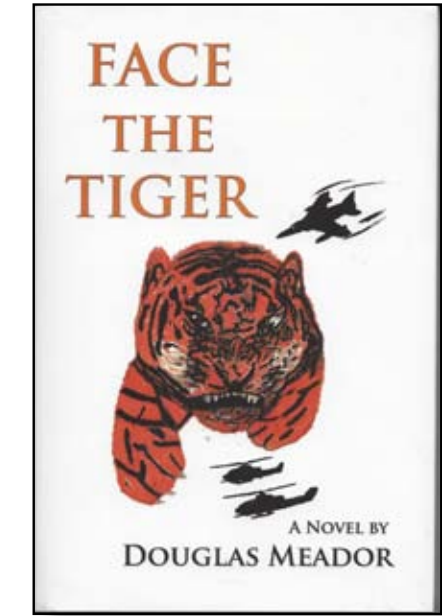
Meador, Douglas
Ellem Publishing, 2010.
279 pp. \$36.78. E-book, \$9.99.
Reviewed by CDR Peter B. Mersky, USNR (ret)

Give a combat-experienced A-4 aviator free rein, CAVU conditions, i.e., no restrictions, and you get this: a wide-ranging, action-packed novel that covers flight training, a host of colorful characters, combat missions over Vietnam, and to top it off, a mini-thriller novel that sews up a few items of personal unfinished business. A lot is obviously based on Doug Meador's own personal experiences. He knows whereof he writes! And writing about Naval Aviation with any authority requires this inside knowledge.

If you're perhaps looking to add to your list of summer reading, *Face the Tiger* is a great candidate. You may find yourself smiling in understanding and answering the question, "Why are you smiling?" from passersby.

Published as a hardcover and also as an e-book, *Face the Tiger* can be found on Amazon for a wide range of prices. We rarely review fiction, but certainly a novel written by one of our own merits attention.

The author flew 329 missions and has a seemingly unending trove of tales. After the Navy, he began a winery in California from which he has recently retired and is currently living in Reno, Nevada. Perhaps we'll run into him at this year's convention.



(Ed. note: Doug Meador has written a second novel, *The Devil's Ransom* (Ellem Publishing, 2012), which unlike *Tiger*, contains no Skyhawk sea stories. It is, however, a well-written thriller, also perfect for a summer read.)

SCHEDULING

Reunions & Requests



PLAN AHEAD

- **Skyhawk Association Mid-Year Board Meeting**, March 31 – April 3, 2016, Holiday Inn San Antonio (Downtown Market Square). Watch website for more details, or email Bill Egen at zerocep@ec.rr.com.
- **MCAA Symposium and Marine Aviation Summit**, May 16-20, New Bern, NC.
- **Skyhawk Association 2016 Annual Meeting and Luncheon at Tailhook**: 12:00 noon, September 09, 2016, Nugget Hotel (www.a4skyhawk.org for details)
- **Tailhook Association Symposium 2016**, Nugget Hotel, Sparks, NV, September 08-10, 2016.
- **2016 USS Hancock Association Reunion**, April 6-11 2016, Town and Country Hotel, San Diego. See www.uss Hancock Association for more information.

List your reunion or event with Skyhawk Association, both print journal and website. Contact the editor at sa-journal-editor@darw.it.



TINS!*

PILOT TURNS DOWN MEDICINAL BRANDY

In March 1972, then CDR George Fenzl, USN, was commanding officer (CO) of VA-55 *Warhorses*, flying A-4 Skyhawks from *Hancock* (CVA-19), known as Hannah. His story:

I launched as lead of a two-plane section before dawn. Arriving on station the forward air controller, airborne (FAC(A)) wanted us to ferret out a tank, which was "causing some distress" in the neighborhood of Hue South Vietnam. I went down pretty low looking for it and got stitched pretty well by ground fire. One round parted a critical fuel line, and all I had was about 700 pounds of fuel in the fuselage tank. I immediately climbed and headed toward the coast. I guess I got up to about eight or nine thousand feet when the engine quit. Now I was experimenting with the glide characteristics of my trusty A-4.

As I was passing 3,000 feet, my wingman reminded me of the mountains below, and I immediately pulled the face curtain. As I was coming down in my parachute, I watched my airplane smash nose first into a ridge. I twisted my leg pretty badly on landing in the steep terrain. I was more or less immobile. Two



"Sandy" A-1 Spads and two "Jolly Green" helos were already on their way from Da Nang.

When a Jolly Green appeared I let go some smoke. The helo pilot had a visual right away and maneuvered in for a pickup, but one of his rotor blades hit a tree, which scared me more than the ejection as I fully expected him to fall straight down and crush me like a grape.

Vibrating and wobbling, he departed for home escorted by a Spad. The other helo got into position some distance down the steep ridge and sent a para jumper (PJ) rescue specialist down on the hoist cable. The PJ crawled up the hill and put me into a harness. They pulled me up like a big bird swinging through the air while the waist gunner sprayed the area with a 50 cal. machine gun to make sure the bad guys down the ridge stayed put. Safe inside the helo, a benevolent gunner handed me a canteen and bade me to drink. It was full of bourbon or rye (I never could tell the difference, but frankly, I did not care). So I made full use of it on the way back to Da Nang.

Tradition has it that a celebration is in order after a successful rescue. Upon arrival in Da Nang, the skipper of the Jolly Green outfit met us on the tarmac with iced champagne, which would have been rude of me to refuse. So after consuming a few of the offerings, I was dispatched to the Navy side at Da Nang.

There I was examined by a flight surgeon while awaiting the C-1A carrier onboard delivery (COD) aircraft from the ship on its way to pick me up. The flight surgeon, being a good sort, provided several portions of medicinal brandy to calm my nerves.

The COD landed back aboard Hannah about 10 in the morning. By then the adrenaline had worn off and the alcohol had taken over, and I was much the worse for wear. I was hustled to sickbay for an exam and, you guessed it, the flight surgeon broke out more medicinal brandy. This time I turned it down.

(Ed. note: this TINS was first published in *The Hook*, Winter 2015. Used with permission.)

TRIVIA ANYONE?

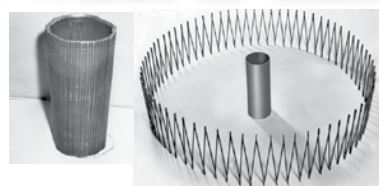
from Gary Verver

Answer to What is this?

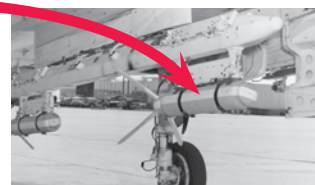
We received two correct answers to the trivia question shown on page 19 of the Fall 2015 (Vol 21-3) issue. Pat

Bole and D.D. Smith identified the mystery object as an expanding rod warhead from a Sidewinder.

CDR Smith would have identified the trivia object from the Summer 2015 issue (Vol 21-2), which was shown on the same page in the fall issue, if



he had seen it. As detailed in his letter to the editor in this issue, he was the China Lake pilot on the Deneye project.



Next Question:

Here's more China Lake trivia - does anyone recognize these items?



Send your answers to: sa-journal-editor@darw.it

Puresome Unplugged

~ YP's Excellent Adventures ~

From *The Hook* magazine, Spring 2001

The Further Adventures of
YOUTHLY PURESOME

by CDR Jack D. Woodul, USNR(Ret), artwork by Carl Snow



Jack "Youthly Puresome" Woodul

Preflightus Maximus

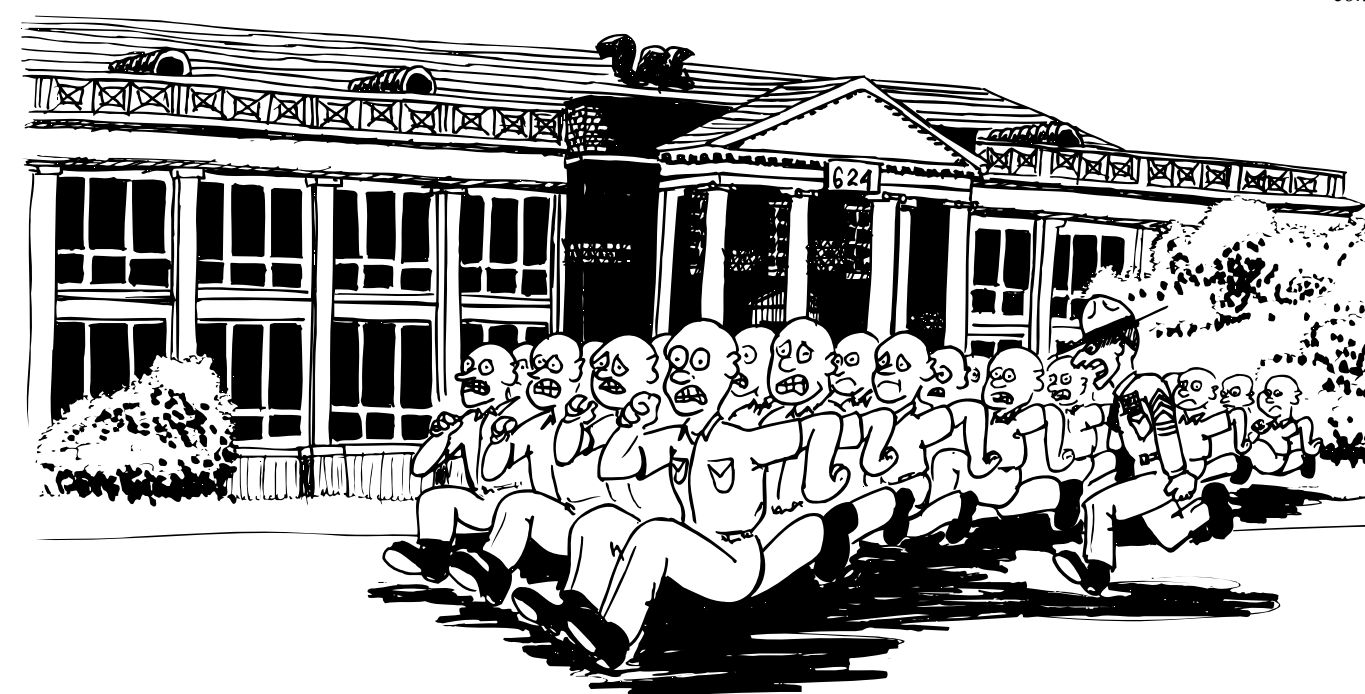
"Holy mierda!" thought Puresome as several wild-eyed, skinheaded creatures in poop suits hustled by him at the double. They were being invited to expedite their passage by a drill sergeant with a voice like an electric cattle prod. Puresome, who was waiting to turn his head and cough for the Preflight quacks at Mainside Pensacola, recognized that these frightened creatures were not Commie Gulag political prisoners, but were "NavCads," Naval Aviation Cadets, who were just starting a hopeful 18-month journey to a commission and golden wings.

Actually, the creatures might also have been another category of beings seen around Mainside Pensacola known as AOCs, or Aviation Officer Candidates. These chaps had completed their four years of university and were only subhumans

for 90 days or so until they got their commissions. It seemed a small distinction at the moment.

Replete in starched khakis with brand-new brown bars on his collars, Puresome could only shudder because there, but for the grace of the Big Guy, went he. Fortunately, the moment of temporary insanity brought about by two years of completed college and a bottle of Jack Daniels Blackness Label consumed one dark and stormy night, did not result in his bugging off to join the Naval Aviation version of the Foreign Legion. A two-day hangover and a certain amount of chagrin resulting from launching a half-pound brick of cheddar cheese through his plate glass dorm window (it'd seemed like a good idea at the time) had luckily distracted him.

continued...



Leaping Tall Hurdles

But getting bureaucrated and administrated into the Preflight program was not precisely a piece of cake. Puresome had come to early grief with the medical establishment when he had noted that he had hay fever — which he didn't — but it sounded better than the sinus troubles he had not enjoyed as a kid. The quacks had hissy fits and promptly bounced him for review. Puresome, scared to death, started back-pedaling furiously, righteously contending that it wasn't really hay fever, but something that lingered from when he was an infant — eastern New Mexico sandstorms must have packed his baby nostrils with dirt, and he had long since snorted that stuff out.

The quacks eventually bought his story and he was reinstated. However, he had in the process learned a valuable lesson. He resolved never, ever again to admit within quack earshot that he suffered from anything a-tall.

Another joyous encounter was with the sandcrabs in charge of travel pay. After laboriously frabbing up several intricate travel claims, Puresome had finally proudly submitted his form to a formidable office pinkette with the beginnings of a handlebar mustache and sparkly rhinestone eyeglasses.

"Oh, Mr. Puresome!" she sighed, disgustingly shaking her great head. The following discussion rapidly degenerated to near fist-fight level, except that Puresome was afraid of what appeared to be stainless steel rat skewers that held her hair bun together. In the end, there was no actual blood spilled, but Puresome didn't get paid a bunch of miles he had racked up on his Volkswagen. He filed the incident away in the "paybacks are hell" folder, fortunately not knowing that he would win very few against the minions of Conanetta the Accountant.

There were two final, formidable hurdles to be leapt over — the screening exams for math and physics. Those wussy, non-aeronautical engineers (such as Pure some) who bothered to show up could be expected to be winnowed out and assigned "stupid study" classes to bring the probably unworthy up to minimal technical standards. Puresome bought a Cliffs Notes booklet on mathematics for the severely inept, and studied up. But he knew that there was no way he could pass the physics exam, since he had always studiously avoided any science that involved anything more complicated than long division.

So he decided to fess up and get started early in physics stupid study. But the bored third-class yeoman empering the desk in the testing office set aside his jelly donut long enough to explain to the silly ensign that it just wasn't procedure. First, you get tested, then you go to stupid study if you don't pass. It was the Navy Way.



Resolving not to be blinded by science, Puresome took the exams. By rigorous use of the wild-ass-guess method, he navigated through "slugs" and "mass" and "ohms." And passed! And another mighty lesson was learned by an amazed and grateful Student Naval Aviator — aggressiveness and dumb luck will often win the fight and occasionally whup the system.

Figuring Out the System

Finally, a Preflight class was formed. More than half the class were freshly spit-shined Marines from Basic School in Quantico. There also was a smattering of NROTC types such as Puresome, a senior LTJG from the blackshoe Navy and a couple of giants that had taken Marine Corps commissions upon graduating from the Aerial Force Academy. The JG was obviously Senior-Dude-Present-Aboard, and soon he was barking "Up, bookbags, hew!" and marching his charges about the red-bricked, white-columned buildings of Mainside Pensacola.

But, evidently, the Honchos in Charge had seen laissez-faire young officers before, and a dress inspection was laid on by an extremely intimidating Marine captain. His cold eyes routed out errant spiffies and Irish pennants as he lambasted the unworthy.

"You people look like Joe Shit the Rag Man! You will not look like Joe Shit the Rag Man any more! You will look like A.J. Squared-Away! These cadets will look at you as officers and expect that you will have your 'eagles up' and your shoes spit-shined. You will square away or you will not hack the program!" he snarled.

Puresome didn't know either Mr. Rag Man or Mr. Squared-Away whom the captain referred to, but he was truly convinced that his liver would be eaten, raw, if he emulated the wrong one. The Quantico Marines already knew about this Rag Man fella, and they smiled secret smiles.

The clear message from the academic side of Preflight was that you had to be totally extraordinary to even presume to make it through the program, and those that were chosen to fly jets would be very elder gods, indeed. Flight Physiology said that jet pilot's blood could boil at altitude, and that the unwary could black out and "buy the farm" if oxygen wasn't sniffed right or the deadly g forces were disregarded. Academics said swept wings, machety-mach and weird stuff like dutch roll and inertia coupling waited to snag even wary deities. And the god-like acts of whanging onto a moving carrier deck without striking the ramp were not even factored in.

Finally, the folks in the academic department said that only a very righteous few with the very top grades would ever make it to jet training. A propulsion instructor noted that Puresome's class was apparently indifferent to the instructor pointing out the private parts of great hulking, cut-away, multi-bank piston engines, so he axed, "How many of you want to be jet pilots?" Pure some warily kept his hand down, aware that Grong the goat god was watching the presumptuous. But several dumb shits actually raised their hands.

"Well, forget about it!" The instructor snarled. "The Navy flies mostly props — P2Vs, P5Ms, S2Fs, some ADs and helos. Only a very few of you are going to fly jets — most of you are going to fly props, so snap out of it!"

Though Puresome was impressed by the long row to hoe and the competition yet to come, he knew that little talk belonged in the same category as the one that invited the listener to look to his right and left, and to know that two of the three would be gone in 18 months. Puresome knew that he could gut it out with the best of them, and he resolved to be the one still there. Maybe he could sneak into Spads.

Fresh Air and White Sand The Obstacle Course

The physical side of training also counted for the final Preflight grade. Puresome had shown up in the moist, Pensacola sun fresh from the seasonal ice age in the Sandia Mountains and from a month of pasta delights rendered by his new child bride. This had left him sleek as a seal and moderately out of shape. This had not caused any problems in the swimming pool, since he was more buoyant, but the first trip to the obstacle course had almost caused an out-of-body experience.

His class had joined a group of South Vietnamese officer students for the two-mile jog out to the course, and Puresome actually survived the run. Since the trip through the obstacle course was a timed, graded exercise, the group was sorted into pairs. The competition, then, was against the clock and one's running mate.

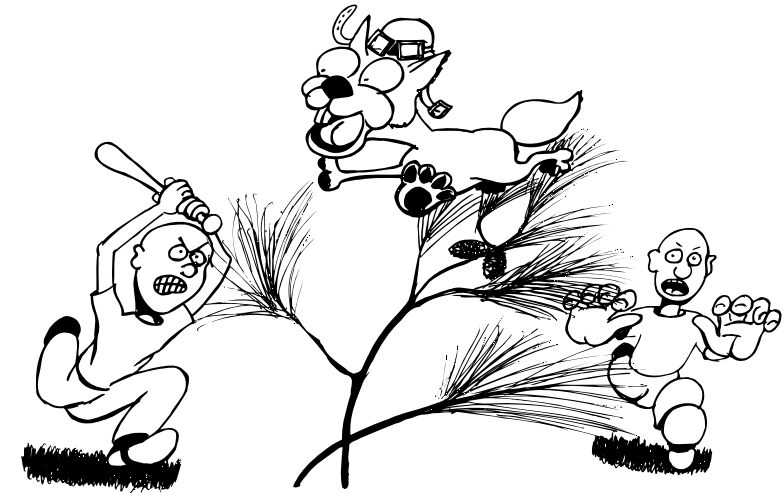
Puresome's partner was a skinny little Marine, and they chatted while waiting for the pairs ahead of them to finish. Puresome started licking his chops when his pale-white competition admitted "he'd been sick!" Unfortunately, when their turn came, the sick little Marine bounced over the barricades like a gazelle of the veldt, scrambled over the barriers like a monkey of the jungle and blistered across the finish line in record time. Meanwhile, far behind, Puresome plodded, wheezed and barely got his plump buns over the rope and barrier obstacles. Fortunately, all the activity and anxiety and hard work melted some lard off Puresome's fanny, and his times improved in subsequent repetitions.

So the training went. Puresome studied more of his fanny off, dreaming of the whine of turbines at 20,000 feet. Listening every night to the cadet choir sing the Navy Hymn at sign off for the local radio station, he hoped the lines "Lord, guard and guide the men who fly," and "hear our prayer, for those in peril in the air" might apply to Student Naval Aviators as well.

He learned real aviator-type talk, like "umpty" for non-specific numbers (three point umpty-ump), "can of worms" for any messed up situation and "buy the farm," which covered the many ways the incautious aviator might mort himself. He finally progressed to the point that he could, without guilt, occasionally shoot a game of pool, visit Pensacola Beach or pass through Trader Jon's on a weekend.

Feasting on Little Furry Creatures

One of the final events was a trip to Eglin AFB for survival training. Puresome looked forward to skulking about the woods, as he had done this sort of thing all his life and enjoyed eating the odd small, furry animal. About the only thing that wasn't fascinating about survival was a couple of thigh-thick swamp rattlesnakes introduced by instructors as examples of really good Florida chow.



The swamp was wonderful! Puresome was out of the classroom, sneaking around the palmetto and pines while, overhead, Air Force F-104s moaned like prehistoric beasts. Since his class only got to eat what they could catch or dig up, the students formed into teams. Puresome studiously avoided the snake team, which was made up of good ol' Southern boys with forked sticks who thrashed small creeks for the wiggly, fanged creatures. Instead, he led the "Rocky the Flying Squirrel Patrol," which was a bunch of barbarians banging on dead trees with sticks. This caused the terrified, Disney-cute little critters to launch themselves into space in frantic escape maneuvers, only to be chased down by a howling mob with cudgels. The total of all the team's bounty — turtle, snake, flying squirrel, palmetto shoots, prickly pear parts and the odd can of tuna someone had sneaked along, was dumped into a tin container with a great deal of water, and the whole mess was brought to a boil over a fire. The broth and beast parts were divvied up among all the extremely hungry young, manly men, who scarfed it down. Unlike the cliché, Puresome didn't think it tasted like chicken. That didn't stop him from wishing for more as he wiped his greasy lips on his sleeve.

Finally, it was done. The ritual "X's" had been put in the first box, and Puresome had done all right among ordinary mortals. A couple of academic weirdoes (one had actually put "Coptic" down for the religion of choice for his dog tags) led the class, followed by the Aerial Force Academy Jarboon ringers. The big dress-up, stomp-and-salute graduation exercise was memorable in that Puresome's pal, 2LT Jawbone of His Majesty's Horse Marines, managed to drip sunny-side-up egg yellow on the front of his immaculate, shiny-white dress uniform tunic during breakfast.

Puresome didn't even have to remind him about Joe Shit the Rag Man.





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