

DFW TAILHOOKERS ASSOCIATION AND SAVING 155629

By Bob "Slick/Spock" Champney

The story of A-6E 155629 and saving the **only** A-6B from scrapping is a long one. 155629 was 360th A-6 delivered to the Navy September 1, 1968. It was the second of three PAT/ARM A-6Bs built by at the Grumman factory (155628/29/30). PAT/ARM was acronym for Passive-angle-tracking anti-radiation missile. It was one of only 19 A-6Bs built or converted to A-6B capable of firing Standard Arm (AGM-78) anti-radiation missile. 155629 sustained combat damage and was later converted to an A-6E SWIP with a composite wing. It accumulated 7079 flight hours with 2149 CATS and 2149 TRAPS

ONLY 19 STANDARD ARM MISSILE CAPABLE A-6B VERSION BUILT

BUNO	# BUILT	A-6B MOD	HOURS	TRAPS	FINAL DISPOSITION	AIRCREW
155629	360	PAT/ARM	7079	2149	DISPLAY Quonset Pt Air Museum RI	
151560	47	A-6B MOD 0	1475	UNK	COMBAT NVN AT SEA 8/20/69 VA-196	BRANDENSTEIN/NEAL RECOVERED
151561	48	A-6B MOD 0	1172	UNK	COMBAT NVN8/29/69 VA-85	DUNCAN/ASHALL KIA
149949	35	A-6B MOD 0	4893	871	MIDAIR WITH 158787 NEAR NELLIS AFB 4/21/93 VA-34 LANDED A/C STRICKEN	DUGAN/JACOBS RECOVERED
151559	46	MOD 0	1842	UNK	CRASHED AT SEA SO CAL 7/30/72 VA-196	TOFT/AUSTIN RECOVERED
151563	50	MOD 0	1110	UNK	CRASHED NEAR NAS OCEANA 10/15/71 VA-42	WRIGHT/ADAIR RECOVERED
152616	169	TIAS	3061	UNK	CRASHED MEDITERRANEAN SEA 7/3/73 VA-34	O'BRIEN/BETZ RECOVERED
155628	359	PAT/ARM	3045	836	ADMIN STRIKE-PRESUME SCRAPPED	
149957	43	MOD 0	3600	912	INTRUDER REEF Daytona/St Augustine FL	
151558	45	MOD 0	5133	806	INTRUDER REEF Daytona/St Augustine FL	
151562	49	MOD 0	7391	1148	INTRUDER REEF Daytona/St Augustine FL	
151565	52	MOD 0	5809	942	INTRUDER REEF Daytona/St Augustine FL	
151820	128	TIAS	5487	808	INTRUDER REEF Daytona/St Augustine FL	
149944	30	TIAS	6364	706	AMARC - Davis-Monthan AFB, Tucson AZ	
149955	41	TIAS	5830	1125	AMARC - Davis-Monthan AFB, Tucson AZ	
151564	51	MOD 0	5367	1163	AMARC - Davis-Monthan AFB, Tucson AZ	
151591	78	TIAS	5586	1061	AMARC - Davis-Monthan AFB, Tucson AZ	
152617	170	TIAS	5303	734	AMARC - Davis-Monthan AFB, Tucson AZ	
155630	361	PAT/ARM	7233	1337	AMARC - Davis-Monthan AFB, Tucson AZ	

AGM-78 Standard ARM



Type	Air-to-surface anti-radiation missile
Place of origin	United States
Service history	
In service	1968–1988
Wars	Vietnam War
Production history	
Designed	1967
Produced	1967–1976
No. built	3,000+
Specifications	
Mass	620 kg (1370 lb)
Length	4.57 m (15 ft)
Diameter	34.3 cm (13.5 in)
Warhead weight	97 kg (215 lb) blast-fragmentation
Engine	Aerojet MK 27 MOD 4 dual-thrust solid-fueled rocket
Wingspan	108 cm (42.5 in)
Operational range	90 km (56 mi)
Maximum speed	Mach 1.8
Guidance system	Passive radar homing
Launch platform	A-6B/E Intruder , F-105G Thunderchief , F-4G Phantom II

Only 19 A-6B Configured Intruders were built



155629 is at a defunct Museum in Quonset Point RI and will be demolished if not saved. If that happens, there will be not an A-6B displayed at any Museum.

155629 Actually fired Standard Missiles in Vietnam



AGM-78 Standard Anti-radar missile (ARM) was fired at Surface to Air (SAM) SA-2 sites in North Vietnam.

Surface to Air Missiles SA-2



SA-2 Missiles the size of a telephone poll were fired at US Navy and Air Force aircraft flying over North Vietnam. The Standard ARM would be fired to home in on the radar guidance system used to guide the missile towards the aircraft.

VA-75 Sunday Punchers



The 19 A-6B variants built were originally intended to be a clear-air (not all-weather capable) versions of the A-6A but were instead adapted to perform the air defense/surface-to-air (SAM) defense role, or in Navy parlance, *Iron Hand* missions.

Shrike & Standard ARM Loaded



The A-6B was the only Navy aircraft capable of firing the anti-radar missile (ARM) of the time, the AGM-78 Standard ARM. When a SAM site locked onto the A-6B the Standard ARM would be fired and home in on the SAM radar.

Plane Captain Removing Cover



The A-6B saw above average losses, in part due to the inherent risk of the *Iron Hand* mission.

1967/1968 USS Kitty Hawk Deployment of VA-75 First Operational Standard Arm Firing

By William "Stu" Allison, DFWTH Member in College Station TX

Beginning the last few months of 1967, two VA-75 Sunday Puncher crews (LCDR Lee Chambers/LCDR Wayne Robinson and LT Stu Allison/LTjg Dan "Shields" Shields) were selected TAD to VX-5 Det Oceana, Virginia Beach, VA. The purpose was to participate in the OPEVAL of the STANDARD ARM, AGM-78A missile interfaced with specially modified A-6A to A-6B aircraft. The evaluation involved collecting classified multi-band antenna data from flights operating on the Electronic Ranges at Eglin AFB in Florida (usually 0 Really Dark Thirty). The raw data was analyzed at VX-5 in Oceana. The goal was to develop tactics for the employment of the A-6B with STANDARD ARM missile in a combat environment. The missile had an approximate 150 pound HE warhead; it had a 56 nm stand-off and turn mode capability; sort of a Super Shrike.

At the end of 1967, TAD terminated, and a TRANSPAC of the two A-6B's was planned from NAS Whidbey Is., Washington. An A-3 would 'Pathfind' the two A-6B's, and a brand new (18 flt. hrs.) A-6A, replacing a combat loss in VA-75. The route was to NAS Barber's Pt, HI, Johnson's Is., Wake, Guam, and to Cubi Point, in the Philippines.

The 'trip' was punctuated by a couple of 'get your attention' events. Nearing Barber's Point, LCDR Chamber's A-6B had one drop tank which didn't transfer. The Pathfinder detached the two A-6B's to land on Maui (approx. 100 nm closer than Barber's Pt.) due to the projected Low Fuel state of Chamber's "B". A little 'pucker' as Maui advised it had no Huffers or Electrical Power Carts. Committed to the descent, however, the frozen fuel air adapter 'unfroze' and began to transfer on approach for landing (of course). Now, looking at about 1,700 pounds of fuel, each, after landing, we immediately shut

one down. AND, we hastily agreed to do a 'cross-bleed' start of the engine (we had secured to save fuel), as soon as we received Take-Off clearance already rolling into position on the duty R/W. Executing a Military Power Climb (we were VERY Light) we climbed at L/D Max. to 17,999 feet and immediately pulled the throttles to idle, and glided in for a landing at Barbers Point, with 1,000 pounds of precious JP-4 remaining.

The 'other' attention getter - On landing approach at Johnson's Is., the "NEW" A-6A had an 'unsafe' left main wheel down indication on the IPI during dirty-up after the 'break'. After trying 'Gs' and yaws, ultimately the crew ended up making a one main-mount up landing. The pilot artfully landed on the extreme left side of the narrow R/W, aiming for the right side of the R/W, speed brakes open, holding the left wing up as long as possible. The A/C swerved left as the wing dropped on the left S/B, and remained on the R/W. Bravo Zulu !!

In Cubi Pt., as I recall, we "bounced" to refresh our Carrier Qualifications, and then waited for our "Charlie Time" overhead Kitty Hawk on Yankee Station.

Once aboard the Kitty Hawk, it was the task of the two crews who had remained back state-side during the OPEVAL, to 'teach' a few selected crew members about the STDARM missile, and the A-6B with its new avionics; and the pre-flight of the multiple "warts" (the newly installed antennas) on the radome, the wingtips and the vertical stabilizer and horizontal tail control surface tips. In the cockpit, several control panels were added or moved to add the STDARM functions (the biggie was that the environmental control panel moved to the pilot's left, aft console from the center console – no more B/N 'equal' access).

On 5 March 1968, Side Number 521, one of VA-75's A-6B's, just like BUNO 155629, was scheduled for its first combat STD ARM missile suppression sortie – a clear night flight. The other two squadron A-6B's launched on the same event as well, and remained just feet wet. The tactics which evolved during the OPEVAL regarding the best way to employ the missile revealed the following: - the stand-off mode, and the turn mode with pre-programmed pitch-up, and - programable target coordinate memory with its associated inertial guidance, - ALL made the AGM-78A a sophisticated, expensive Shrike (no intent to diminish General Dynamics) with a bigger warhead. A DOWN THE THROAT SHOT was the hands-down most effective delivery method, according to the OIC of VX-5 Det Oceana.

So, on that memorable night the author of this short blurb (with failing memory) and his swarthy B/N, Dan "Shields" Shields, set out to KILL a SAM site. We climbed to 31,000 feet, positioned our A-6B about 12 miles South West of Hanoi, TROLLING.

Watch what it is you WISH for (ending the sentence with a preposition). At Seven miles with Master Arm on and Station 2 selected, here came the dreaded 'Deedle-Deedle' accompanied by TWO telephone poles, on the nose. (And, Now This is when you know a young Navy Pilot is telling the story.) I smoothly pushed over, and banked to the Right to place the SAMs on my left, and (just like hassling back home) somewhat buried the nose and pulled hard. Defeating the SAMs, and as I was checking altitude, I noted two things. First, the altitude was already down to around 18,000 feet; and there were TWO more SAMS guiding toward us - Oh, JOY. Now, I'm going on what I Think I did – armed the other wing station, pickled our second STDARM, and again turned to place the second pair of SAMS on My Left Side. Again, kept my nose down and energy up (must have; it's 2021 and I'm still typing :>))). Built-in BDA and our cockpit clock checks both confirmed that the site stopped emitting simultaneously. My altitude rounded out down around 3,500 feet. I leveled my wings, headed east, and OH, MY, What is that?? Another one of those telephone pole things. Only, it was coming from above me ---- YES !! I Quickly checked my attitude, YES, Upright; my altitude, above 2,000 feet. I SCREAMED at my B/N, "Turn Off the 51's". I had

remembered from the OPEVAL work that a STDARM (and Red Crown) could/would home on an "S-Band" signal.

Do you think one of the other two "B's" loitering, off shore, could have fired on us? I'll always wonder.

"Shields" got even with me for shouting at him about the ALQ-51's. He, Not so calmly, asked, "Stu, Would you cool the cockpit down, -- I'm Sweatin' My ASS?" (remember where the A/C control panel got moved ??)

Well, anyway. We went over Indian country; Check. We were Shot at; Check. Yeah, that's another Two Points

155629 1972/73 USS Kitty Hawk Deployment of VA-52

By Larry Yarham, Past IA President

The Grumman A-6B Intruder with the Passive Angle Tracking/Anti-Radiation Missile (PAT/ARM) System coupled with General Dynamic's AGM-78 (Air to Ground Missile) Standard Arm was an extremely lethal system deployed against North Vietnamese Guideline SAM Missile systems. So lethal, the SOP radio call on Guard of "Ramjet...Ramjet" when a missile was launched, was typically omitted as the missile sites would shutdown when they heard the call. "Ramjet...Ramjet" was a very effective radio call to shut down the SAM site when being tracked and there were no A-6B Standard Arm Aircraft airborne.

I graduated from VA-128 January 1971 with assignment to VA-52, embarked on USS Kitty Hawk in WESTPAC. Toward the end of my RAG instruction, with the known assignment to the deployed Knightriders, I was teamed with the late LTJG Fred House, who was also assigned to deployed to 52 on the Hawk. To compensate not being with the squadron during pre-deployment exercises, Fred & I had additional RAG flight instruction, particularly night visual bombing, SAM evasion and missile deployment (SHRIKE being the intended weapon).

Arriving Kitty Hawk, Fred & I were split up, I was teamed with the skipper's BN, Jim Vanderhook and Fred with the OPS officer J.E. Ramsey. These 'trial flights' continued while were evaluated, learned the various strike methods and proved that we were capable of flying as a team. Sometime later in that same 68-day line period we had proven we were capable of flying as a Team which included being designated A-6B Standard-Arm Crew. Fred & I remained a team for 1971 and 1972 Kitty Hawk WESTPAC cruises.

VA-52 had three A-6B PAT/ARM aircraft: 155628, 155629 & 155630 on both the '71 & '72 cruises. Kitty Hawk had Shrike Anti-Radiation Air to Surface Missiles in addition to the Standard Arm AGM-78's. The Intruders and the A-7 Corsairs were capable of firing the Shrike and they were not considered capable of seeking and/or destroying the SAM sites, so there was a general agreement to fire off any and all Shrikes we were loaded with.

During the '72 cruise, we had one line period in the South followed by a rapid move North in support of Lam-Son 719, which moved our bombing into heavy SAM activity. Fred & I, along with other Knightriders, were designated as A-6B PAT/ARM crew. Fred & I flew bombing and ARM missions in one

of the three A-6B's a total of 63 flights. We fired some 15 AGM-78 Standard Arms supporting the Kitty Hawk airwing, many from 155629.

The USS Coral Sea was also conducting bombing of NVN with A-7's and the Marine A-6 squadron VMA(AW)-224 Bengals that also had A-6B PAT/ARM Intruders. During the summer of '72, Coral Sea requested an A-6B from Kitty Hawk be provided to Coral Sea in support of their Alpha Strikes until the Marine A-6B's were returned to operational status. I drew the short straw and flew 155629 over to the Coral Sea to support VMA-224's ARM tasking during Alpha Strikes. During the Strikes, we fired 5-6 Standard ARMs. We remained a part of the Coral Sea Airwing until the Marines returned their A-6B's to operational.

Interesting note, VF-51 Screaming Eagles F-4 squadron was a part of the Coral Sea squadrons. A very good friend from little Atlantic Iowa and Iowa State University, Tom 'Bully' Terrell was flying with the Eagles on many of the Coral Seas strikes we provided ARM support.