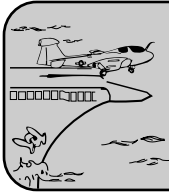




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LAUNCH

Dating from the Eisenhower administration, the Zappers of VAQ-130 have led the way in Navy electronic warfare for more than 40 years. Originally designated VAW-13, the unit is the longest serving carrier-based electronic warfare squadron in Navy history, and has flown the Navy's three primary tactical jamming aircraft into the heaviest, most threatening electronic environments ever faced by manned aircraft.

The history of carrier-based electronic warfare has been driven by the parallel development of the threat. During World War II the Navy modified a small number of Grumman *Avengers* into TBM-3Qs that provided limited capability against the few radars fielded by the Japanese. Douglas Aircraft subsequently used the AD *Skyraider* as the basis for 119 two-seat EW aircraft designated AD-1Q through -4Q. The "Queen" version of the "Able Dog" carried a single pilot along with an enlisted man buried in the fuselage to operate the signal receiving gear and jammers.

During the Korean War, most carrier air groups deployed with one or two of these *Skyraiders* for use by the embarked prop attack squadrons or attached composite teams (detachments). Fully capable of attack operations, the Queens were typically mixed in with other ADs on strike missions, during which they provided some protection from Communist anti-aircraft guns as well as adding their own ordnance load to the effort. Six of these EW *Skyraiders* would be lost to the enemy in the "Land of the Morning Calm."

The electronic threat during the 1950s was Soviet-built anti-aircraft artillery (AAA) fire-control radars. Typical of these was the SON-4 (NATO code name *Whiff*), a Soviet copy of the American SCR-584 gun-fire radar that had been provided to the Russians during WW II for use against the Nazis under Lend Lease. The threat progressed rapidly, and before long new early-warning and height-finding radars appeared in the enemy order of battle.

To keep pace with these rapid improvements, the new four-seat AD-5 became the basis for the AD-5Q, a dedicated electronic warfare platform that was to become the standard carrier-based jamming aircraft for the next decade. While the Marines also used the earlier electric Spads

in its VMC squadrons, they opted for the jet-powered F3D-2Q *Skyknights* to respond to their EW requirements instead of the AD-5Q.

Fifty-four night-attack AD-5Ns were rebuilt into Q's during the mid-'50s, with six more being modified during the 1960s to make up for aircraft lost. Once in the fleet, the aircraft immediately was given the "Queer" nickname that was unofficially applied to all EW ("Q") types in the Navy. Although also known as "Fat Spads" to some, the Queer Spad moniker would become almost universal.

Throughout this period the Navy considered the airborne early warning and radar countermeasures missions to be closely related. On the West Coast, the new aircraft initially went to NAS North Island-based VAW-11, the self-styled "largest operational squadron in the Navy" with 85 aircraft assigned. At that time Early Eleven also operated the AD-5W "Guppy" *Skyraider*, which provided airborne radar coverage for the fleet, as well as F2H-4 *Banshee* night fighters. As of January 1959, VAW-11's listed strength was 49 AD-5Ws, 23 AD-5Qs, 12 F2H-4s and one SNB. The night-fighter mission lasted only a few months longer.

VAW-13 Is Born

In 1959 AirPac decided to form a sister unit to VAW-11 with which it could share these important duties. Perhaps the decision was made because of the sheer size of Early Eleven — perhaps it was to gain another important squadron command slot. For whatever reason, *Carrier Airborne Early Warning Squadron 13* (VAW-13) was established at NAS Agana, Guam, on 1 September 1959 with eleven officers, fifty enlisted and three AD-5Ws. Subsequently, three VAW-11 teams transferred to the new squadron during their WestPac deployments in order to further stock Early Thirteen with both Guppy and Queer Spads. LCDR Henry Kriszamer was named VAW-13's acting commanding officer until the arrival of CDR E.K. Hitchcock Jr., in February 1960.

Administratively, the squadron reported to Commander Fleet Air Southwest Pacific (ComFairSoWestPac), and the new outfit's official mission was "... to provide airborne early warning and electronic countermeasures to the Pacific Fleet as directed by the *Commander 7th Fleet*."

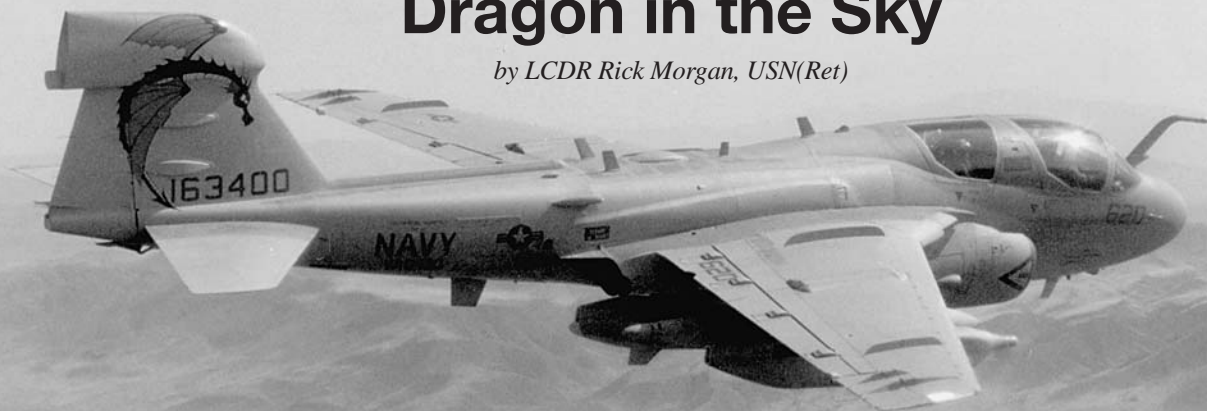


USN, LTJG Chad Larges, USN

A History of VAW-13/VAQ-130, Part I:

Dragon in the Sky

by LCDR Rick Morgan, USN(Ret)



A VAQ-130 EA-6B, adorned in the vertical stabilizer with "Robbie," the fanciful dragon featured in the Zapper's squadron insignia, flies in a training mission over the desert, 20 May '96. The present squadron dates from 1 Sep '59, when VAW-13 was established as an airborne early warning squadron at Agana, Guam.



The AD-5W "Guppy Spad" was the first aircraft assigned to VAW-13, with its initial aircraft coming from sister outfit VAW-11 (pictured). The AEW version of the Skyraider didn't last but two years before moving back to "Early-11," as VAW-13 became a dedicated ECM outfit in 1961.

Ditching the Fat Spad

Robert Carlton was a junior officer assigned to VAW-13 in 1966 as an NAO(E). He has the distinction of having been involved in the ditching of not one but two EA-1Fs within months of each other, and both in the South China Sea during the Vietnam War.

His first mishap occurred while assigned to USS *Franklin D. Roosevelt* (CVA-42), a Mayport-based carrier, which had left Florida on 25 July for the only combat deployment of its career. *Air Wing One*, also from the East Coast, was on board, and by 10 September they'd already lost four aircraft (three A-4s and an RF-8A) and one pilot. By the time the ship and air wing returned home in February 1967, the number had risen to 15 aircraft lost — seven combat-related and eight operational losses, with nine crew killed and two POWs.

Carlton and his crew manned up their Spad one September night as one of two *Zappers* birds assigned to cover a night strike into the North. As the crew's NAO, Carlton strapped into the front right seat. The pilot was LT Lanny Cox, and two enlisted EW operators, AD1 Andy Andersen and ATN2 Gordon Johnson, made themselves comfortable in the back.

Launch was scheduled for 0200. The aircraft assigned, BuNo 132543, had experienced odd electrical problems on previous flights, and Carlton had strong reservations about flying it that night, particularly since weather was forecast to be poor. Despite this, they launched as scheduled.

The transit to their jamming point 50 miles south of Haiphong was uneventful. Shortly after their arrival on station, Carlton noticed that the bird's voltage meter was fluctuating, a sure sign of trouble. He told the back-seaters to secure power to their system, but it didn't help. Things quickly went from bad to worse.

The engine now began to run rough, and flaming chunks of something came out from under the cowling and howled over Carlton's head. The NAO then noticed flames from under the dash on his side. None of this was normal, he thought, even for a recip.

The electrical fire was coming from a bundle of wires within a few feet of the main fuel tank that contained about 380 gallons of 115/145 octane av gas. This was not good. Carlton had time to get out a quick Mayday call just before the aircraft's electrical system decided to take the rest of the night off. The good news was that the engine sounded normal again, and the fire at Carlton's feet had stopped.

They reviewed their situation — low over the Gulf of Tonkin off a decidedly unfriendly beach, at night, in the rain and with no electrical power in the cockpit. No sweat — just another article for *Approach* magazine, right?

Carlton pulled out his flashlight while the pilot used good-ol' basic

Only one month after its establishment, the squadron deployed *Detachment Alfa* in USS *Kearsarge* (CVS-33) with AD-5Ws. The first "big-deck" det out of the barn was *Detachment Mike*, which took three Guppies and a pair of Queens on board *Ranger* (CVA-61) on 9 March 1960. Shore-based detachments with "W" and "Q" versions assigned were also dispatched to Japan and Okinawa.

Typical of the smaller operations during this period was *Detachment November*, which cruised in *Hornet* (CVS-12) during July 1960. The officer in charge was LCDR Krizamer, who had 10 officers, 2 CPOs and 33 whitehats assigned, as well as four AD-5Ws wearing 710 series numbers and the newly assigned squadron "VR" tail code.

1960 would bring the introduction of the Guppy's replacement in the form of the Grumman WF-2 *Tracker*, aka "Willy Fudd." AirPac initially planned to equip both VAW-11 and -13 with the twin-engine aircraft, and seven new Fudds were accepted by the squadron in Guam before a major change was ordered for Early Thirteen.

A Single Mission and a Change in Scenery

By 1961, Commander Naval Air Force, Pacific Fleet (AirPac) decided to completely reorganize the airborne early warning community. VAW-13 had deployed only three Willy Fudd dets before the Navy decided to split the electronic warfare and airborne early warning missions into separate squadrons. Early Thirteen was chosen to be AirPac's carrier-based electronic countermeasures unit, and soon received instructions to transfer its radar birds to VAW-11 while assuming custody of all of AirPac's deploying AD-5Qs.

instruments for control. Prior to lights out, Carlton had noticed that the Tacan had shown their carrier to be 140 degrees at 182 miles, so they turned the darkened Spad in that direction. The wet compass didn't seem much help, but they managed to DR their way back to where they thought the boat would be. Unknown to them, the ship had decided to head farther south 40 miles or so to avoid the same storms the Spad was in.

The front-seaters talked about heading for Da Nang, but realized that if their navigation was off just a wee bit, they'd instead end up over North Vietnam. While reviewing their options, the pilot switched to the belly tank. The resulting silence was deafening as the engine quit.

The pilot quickly flipped back to the main tank and the R-3350 coughed back to life. That was the final straw — they agreed that they'd pushed their luck far enough, and ditching was the prudent thing to do. The time was about 0500.

Carlton had been trying to talk on his survival radio on Guard frequency, but had not received a reply. Cox did an excellent job of ditching the bird, and all four crewmen quickly exited the sinking aircraft, inflated their rafts and lashed them together while hoping that somebody had heard their calls for help. They continued to make calls every 15 minutes on Guard with their survival radios.

About two and a half hours later they heard props — and soon had a section of VA-165 A-1Js from *Intrepid* (CVS-11) overhead. Not long afterward, an Air Force Rescue HU-16 *Albatross* amphibian, piloted by CAPT John Sommercamp, appeared and landed nearby. Once on board, the Spad crew was off to Da Nang where the group dried off and had breakfast. An hour and a half later they were on FDR's COD on their way back to the ship.

It was later determined that the engine-driven generator had locked up and caught fire. The flaming pieces that had caught Carlton's attention were parts of the generator flung free of the aircraft as it melted down.

Carlton reports that his brother, an SH-3 pilot with HS-6 in *Kearsarge* (CVS-33), had been flying SAR that day and was en route to the crash site, but was beaten by the *Albatross*. He also found out later that their initial mayday call had been heard by the VAW-12 Willy Fudd (E-1B). The Fudd, having spotted the crippled Spad on their radar, had requested permission to rendezvous with it and lead it home. The request was denied, reportedly by a blackshoe CIC officer who, assuming they could find their own way home, also failed to dispatch anyone else to help them or tell anyone on the ship of their problem. It wasn't until the det realized that one of their birds had missed the recovery that they started asking questions as to the whereabouts of the Spad.

All in all, it was just another night in the Gulf of Tonkin.

Coincident with the narrowing of the mission was the squadron's summer 1961 move to California. The *Zappers*, as they were now called, loaded ground personnel and dependents on the transport USNS *Hugh J. Gaffey* (T-AP-121) on 9 July for the 12-day trip to NAS Alameda and, on arrival, the squadron reported to Commander, Fleet Air Alameda. Ramp space at Alameda had become available with the movement of VP and VA assets elsewhere throughout the Pacific Fleet, as well as the opening of NAS Lemoore the same year. The "Station By the Bay" would remain the squadron's home for the next 13 years.

During its roughly two years in the Marianas, the squadron had backed up its "We Can Hack It" motto by flying from 11 carriers while producing 13,268 flight hours with 1,471 day and 529 night traps, Class-A mishap free.

VAW-13 quickly adapted to its new home and, by mid-August, four det sets were deployed in the Pacific. This time, however, each det functioned strictly as an EW unit with its assigned three or four AD-5Qs each.

By 1962 the home squadron was reporting about 350 personnel (roughly 60 officers and 290 enlisted) on board while the number of AD-5Qs assigned had risen to 19. At the same time, the unit accepted two TF-1Q *Traders* from Early Eleven. These aircraft were modified from Grumman's trusty twin-engined COD aircraft and were first cousins to the recently departed Willy Fudds. The Queer *Traders* carried a suite of jammers and chaff systems for use as land-based jammers in fleet exercises. The pair, redesignated in 1962 to EC-1A, would remain fixtures in the squadron until 1968, as would one or two "straight" AD-5 or AD-5Ns (later A-1E and A-1G) that were kept on hand for use as hacks by the home squadron.

Chasing the Will O' the Wisp

By 1962 the situation in Southeast Asia had reached a point where the U.S. government could no longer keep it on the back burner. Amid all the other problems in the area, PacFlt intelligence reported that unidentified aircraft had been flying low at night over South Vietnam's central highlands, and it was quickly assumed that the North Vietnamese were now delivering supplies to local guerrilla forces by air drop. The most likely suspect was the Soviet-supplied AN-2, a stout, radial-engined biplane that was known by its NATO code name *Colt*. The Joint Chiefs of Staff directed the Air Force and Navy to come up with plans for dealing with the intruders. Predictably, each service had a slightly different idea.

The Air Force chose the primary all-weather interceptor in Pacific Air Force's inventory, the F-102 *Delta Dagger*. The "Deuce," as it was known, was a single-seat jet capable of just over Mach 1. PacAF had five squadrons of the aircraft based in-theater and immediately available. The *Delta Dagger's* normal armament consisted of up to six AIM-4 *Falcon* air-to-air missiles as well as two dozen 2.75-in. unguided rockets.

The Navy, on the other hand, decided that what it needed was a low, slow flier, something a little closer to the *Colt's* performance. Eschewing the fleet's regular fighters such as F8U *Crusaders* or F3H *Demons*, the AD-5Q received the nod, and VAW-13 was given the job.

It really wasn't a bad selection, either. Having been developed from the night-attack AD-5N, the Queer Spad had provisions for two radars, the ground-mapping APS-31 as well as the air intercept APS-19 that had been used previously by the F8F-1N and F4U-5N night fighters. The multiplace cockpit gave the pilot a trained radar operator (a Naval Aviation Officer) in the right seat to help him find the elusive bogeys. Additionally, the Spad's slow speed gave it a better chance of staying with the bad guy down low, more so than a large, delta-winged jet, the Navy supposed. Armament would be guns only — the wing-mounted 20mm cannon.

Not everyone was happy with the project. Those at 7th Fleet objected strenuously, arguing that ships shouldn't have to do without their only dedicated EW aircraft to pursue a will o' the wisp. CinCPac overruled the objections, and with that decision the men of VAW-13 were now night fighters covering the Navy's part of what was to become *Operation Water Glass*.

On 7 May 1962 CinCPac ordered the establishment of land-based operations at Cubi Point in the Philippines to support the new mission and other regional commitments. Four detachments were brought ashore and combined to form Cubi's *Detachment One* on 14 May. The beached units included Det Foxtrot from *Lexington* (CVA-16), Det Delta from *Coral Sea* (CVA-43),



"We're Missing an Airplane"

by Bill Welch

Bill Welch was a lieutenant junior grade with the *Zappers* on USS *Midway* (CVA-41) when the squadron suffered its only combat loss.

"[We] briefed the mission and were turning on the fantail with Jim Parks as the primary, with back-up [spare] being Gerry [Romano] and MD [McMican]. Our plane was downed due to radio problems, and Gerry and MD were launched, double cycle, for ECM protection of a strike north of Vinh or Than Hoa.

"As the second cycle was returning, I was watching the ready room monitor waiting to see *Robinson* [the squadron's call sign] return. They announced 'recovery complete,' and no *Robinson*.

"I went to strike and told them that they were missing a plane. They looked at me in disbelief, but finally got things in motion. As we now know, MD and Gerry were shot down along the coast of North Vietnam while assisting in a SAR mission.

"As for the rest of the story, I was the survey officer of Gerry's personal effects, and while going through his stuff I came across his officer's hat. Inside was the name card and the name read 'ENS William Welch' ... the cap was *mine*. I checked my cover and turned over the card where I had written my name and discovered on the reverse side the name 'ENS Gerry Romano.'

"At some point in preflight at Pensacola our hats had been swapped — you all know how everyone's hat was in the same place in the chow line?

But for a radio...."

USN, PH3 R.W. Lowry, USN



A Zapper EA-1F's pilot pushes the throttle to the firewall as the cat officer signals for launch on board Intrepid (CVS-11) in a dramatic view of flight deck activity during the Vietnam War.



Left: An early ECM aircraft was the EC-1A, a modification of the Grumman C-1 Trader, known before the designation change as the TF-1Q. These "Electric Traders," two of four such aircraft delivered to the Navy, are assigned to VAW-33. **Below:** A Zappers EA-1F enjoys clear skies in the Tonkin Gulf. Marked for Cubi Point's Det One, this aircraft carries APS-31 (starboard) and APS-19 (port) radars. Two ALT-2 jamming pods are on the port outboard wings, and an MXE-400 pod is barely visible to starboard. This particular aircraft was lost in a cold cat shot from Hancock (CVA-19) on 20 Jun '66, with the loss of the pilot.



Det Lima from *Hancock* (CVA-19) and Det Alfa from *Midway* (CVA-41). *Detachment One* would be a squadron fixture for the next few years and the center of combat operations through the remainder of the Spad years. In addition to Det One, VAW-13 also had a periodic operation in Hawaii in the form of *Detachment Hotel*, established to support jamming requirements in the Hawaiian Sea Frontier area.

Training for the mission began in earnest and the plan seemed sound, at least in theory. It included working with ground control intercept (GCI) stations that vectored the aircraft close enough to the bogey for the crew to finish the intercept with on-board radar and cannon.

Over the next two years, the two services alternated sending aircraft to Tan Son Nhut Air Base near Saigon — the Air Force with its sleek, supersonic, missile-armed jets and the Navy with its piston-slapping, oil-leaking (but classy) Spads. In the end, both types of aircraft had the same results — zero kills. The Air Force portion of the mission was also known as *Candy Machine*, and in time included use of two-seat TF-102s as a second pair of eyes.

As simply put by one AD pilot involved in the mission: "It was a joke." GCI typically had trouble maintaining contact on fleeting targets in the region's undulating terrain — if the enemy was there at all. Crews next attempted using starlight scopes to help find the reported bogeys, again with no luck. It quickly became apparent that the biggest threat was the ground, and many flights developed into an exercise to keep from impacting *terra firma* while chasing phantom aircraft. The program drew to a close by November 1963, and VAW-13 temporarily secured its Vietnam ops. It may have been the end of the *Zappers'* night-fighting, but its work in Southeast Asia was just beginning.

Going to War With Electrons

The establishment of *Detachment One* at NAS Cubi Point proved a seminal event in the *Zappers'* history. Instead of deploying on board carriers as detachments formed in Alameda, Cubi's Det One continued as the focal point for the squadron's EA-1F operations. (The AD-5Q had been redesignated EA-1F in September 1962 in the DoD-wide aircraft nomenclature system change.)



For a short period while Vietnam was still simmering, *Zappers* operated from the beach with little time spent on board carriers. The jamming of ships and fighters was now the normal routine, and VAW-13 aircraft visited U.S. bases in Japan, Korea and Okinawa regularly to conduct business.

Det One had settled rather comfortably into Cubi, particularly after it was assigned hangar space and a permanent group of BOQ rooms. The arrangements quickly grew into legend as the "Zapper Lounge," an attractive and welcome place for aircrew to relax while far from home. Flight crews and maintainers still deployed from Alameda for six-month periods, but would normally ride a transport aircraft to and from Cubi. These movements initially involved a grinding, island-hopping journey on board lumbering Navy C-54s or C-118s, although commercial jet charters were utilized more frequently as the war progressed.

Things in the pastoral paradise were bound to change, as by March 1965 Cubi began supplying EA-1F "sub-dets" to carriers, with *Midway* and CVW-2 apparently the first to receive organic EW support. For the next three years, practically



USN



A Zappers EA-1F Spad, outfitted with two ALT-2 jammers on the outboard wing stations, an APS-31 radar pod on the right inboard station and a centerline fuel tank, leaps from Constellation's (CVA-64) waist catapult, Aug '67.

every flight deck that called on Yankee Station had *Zappers* Spads on board to cover the EW needs of its embarked air wing.

At the start of the Vietnam War, the Navy had only 24 deployable EA-1F airframes to cover all of the electronic jamming requirements of the fleet. While Atlantic Fleet ships used VAW-33 Spads deploying from NAS Quonset Point, R.I., Cubi's Det One typically had between eight and a dozen aircraft assigned, with teams deck-hopping as needed between carriers to support TF-77's rapidly expanding operations into North Vietnam. The use of a permanent forward detachment was unique among Vietnam-era squadrons, and allowed the unit to keep their limited assets where they needed to be. While ships rotated on and off

Yankee Station, the *Zappers* moved to a new deck and remained on station. Their "migrant" crews typically worked from five or more decks during a half-year tour at Cubi, with stays on board running from a few days to several weeks. Maintenance men transferred between ships by helos and highlines, with their gear, with luck, following behind. *Zappers* crews were aboard both *Oriskany* (CVA-34) and *Forrestal* (CVA-59) when they suffered their deadly fires. Whenever Navy aircraft went over the beach up North in force, EA-1Fs were nearby in support.

Never permanent members of the air wing, VAW-13 crews and maintainers were forced to beg, borrow or otherwise squat on space needed to carry out their mission. More often

than not, aircrew would share a ready room with the embarked A-1 squadron, although in truth any squadron would do. Berthing was always a challenge for the visitors, and the solution frequently involved cots in crowded staterooms or, as happened on at least one occasion, taking over a portion of a ship's sick bay.

The pace for aircrews could be daunting. John Marlin arrived as an ensign NAO(E) at VAW-13 and first deployed to Det One in September 1966. By November of the next year he'd made two six-month trips to the war zone and had flown 221 "green ink" flights while racking up 531 combat hours and 171 traps on nine carriers.

War for the Queer Spads was usually fought off the coast, flying orbits at 8,000 to 10,000 feet while pulling double or even triple cycles. Back in the "blue room" in the fuselage of the *Skyraider*, two enlisted aircrewmen, usually aviation electronics technicians, would operate the receiver gear and jammers. New NAOs also pulled duty in the aft area, which was noted for its complete lack of forward visibility and small, heavily tinted side windows.

Normal loadout for the aircraft typically started with a 300-gal. centerline fuel tank. A bulky APS-31 search radar was usually carried under the right wing stub, and up to four EW pods (either ALT-2 jammers and/or ALE-2 chaff, both of which looked a lot like additional fuel tanks) were carried on the outboard wing stations. Two wing-mounted 20mm cannons were intended to give aircrews the idea that they had at least a small measure of self-defense.

The usual object of the *Zappers*' professional interest was AAA radars, with the *Whiff* and *Fire Can* the primary targets. Although the type could jam the SA-2 ground-to-air missile's *Fan Song* fire control radar, insufficient power and geometry usually limited their effectiveness against that particular threat.

The monotony of the missions up North occasionally led some crews into "testing" their cannon on sampans or junks that appeared below. Not that they totally escaped the interest of their enemy, as occasionally a MiG was detected venturing out over the water, apparently with the idea of bagging a slow-moving *Zapper*. A warning call from the local E-1 *Tracer* or Air Force EC-121 would be followed by the Spad's pilot initiating a split-S for the deck and a high-speed (for a Spad, at least) run eastward.

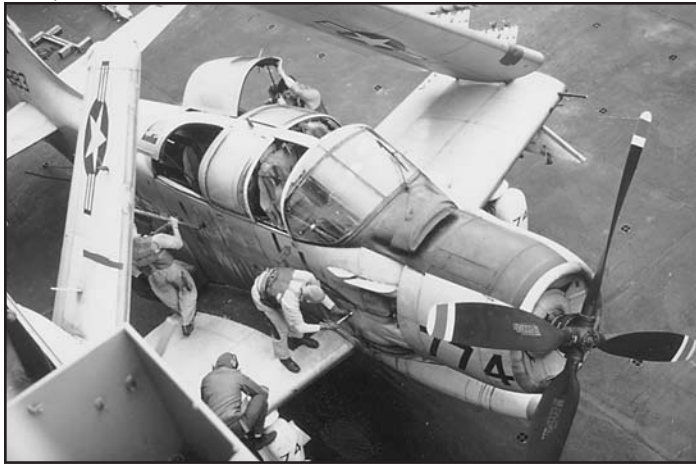
Being a detachment operation a long way from home meant that most of the combat assignments were flown by pilots in the grade of lieutenant and below, augmented by a core of dedicated lieutenant

Grady Jackson: Zapper Admiral

Among the men of VAW-13 in the early '60s was Grady Jackson, a young Indiana native who'd joined the Navy after being designated an NAO at NAS Glynco, Ga., in June 1962. Even with no formal electronic warfare training (the Navy did not have an officer's course for airborne EWOs at that time), ENS Jackson joined the squadron in Alameda and was soon on his way to the Philippines for deployment.

Grady was the "Baby *Zapper*," the junior officer in Det One for most of his tour. The honor was dubious, as it was a position that included a number of lousy jobs in a squadron full of lieutenant commanders and senior lieutenants. Jackson left the unit after two deployments to Cubi, still as a jaygee. He returned to Glynco where he was instrumental in establishing the Navy's first officers' airborne EW school. After a staff tour he transitioned to A-6A *Intruders*, where he flew with the *Sunday Punchers* of VA-75 in combat as a member of CVW-3 in *Saratoga* (CVA-60). He returned to the EW fold as XO and skipper of VAQ-134 in 1977, and subsequently commanded Diego Garcia, Medium Attack/VAQWingPac and NavBase San Diego.

Promoted to rear admiral in 1985, Grady is one of at least two *Zappers* to reach Flag rank. Anyone who has met Grady will agree that he's a true gentleman. He now resides in South Carolina with his wife Linda, and continues in the EW field as a consultant. RADM Jackson openly credits his first tour with VAW-13 as convincing him to stay in the Navy.



Left: A VAW-13 crew pre-flights VR 774 on unidentified carrier. The front seats were accessible by sliding canopies, while the rear seats had their own clamshell covers. **Left, below:** LTJG John Marlin on the wing root of his VAW-13 EA-1F, 1966. Marlin wears a common flight-gear outfit consisting of modified utilities with a pocket sewn onto his left leg and a pencil pocket on the left sleeve.



While the *Zapper* managed to escape, the *Fist of the Fleet* bird was shot down and the pilot, LTJG Joseph P. Dunn, was officially declared lost. Although a beacon was heard for several hours after the shoot down, attempts by CTF-77 to initiate a SAR for the downed pilot over Chinese territory were stopped cold, reportedly on the direct intervention of the Pentagon. Dunn's fate remains unknown to this day.

By the mid-'60s it was obvious that the EA-1F was rapidly falling behind the threat as a jamming platform as a result of the aircraft's age and performance limitations. Moreover, its electronic warfare equipment was limited in frequency coverage as well as power output. It was clear that the Fat Spad's time on board at VAW-13 was drawing to an end.

The final recorded combat employment of VAW-13 Spads was on *Kitty Hawk* (CVA-63) in April 1968. Det 63 had started its cruise from Alameda and was one of the few, if not the only, EA-1F det to actually leave from California. Det One at Cubi sent its remaining aircraft home and was formally disestablished on 10 August 1968, although the squadron kept maintenance support personnel at the location for several years afterward under the titles "Det 101" and "JamDet."

The *Zappers'* AirLant counterpart, the *Night Hawks* of VAW-33, cruised in *Intrepid* (CVS-11) and *Ticonderoga* (CVS-14). The cruise on the latter carrier closed out the *Skyraider's* combat employment with the U.S. Navy in August 1968 (see "The Firebirds of Key West," *The Hook*, Wi '83).



VAW-13 was entering the jet age.

commanders. The CO and XO usually stayed at Alameda along with, as several former squadronmembers put it, a "... palace guard of older lieutenant commanders who seemed to do little more than stay in California and fight over parking spaces." According to squadron lore, one CO put in an appearance and flew combat — only to return to the ship with more than 100 holes in his aircraft following a sightseeing trip perhaps a little too close to Vinh. The aircraft involved, VR 708, nicknamed the "Lady Lynn," was sent back to California where it reportedly languished for years in the NARF dead pile.

The *Zappers'* single combat loss occurred on 2 June 1965 while flying with CVW-2 off *Midway*. An A-4E from VA-23 had been shot down by AAA in North Vietnam and a SAR effort was requested. EA-1F 132540, with its crew of four, responded to the call and headed inbound to provide close EW support. The aircraft itself was hit by gunfire and was seen to crash in flames. None of the crew, LTJG MD McMican, LTJG Gerald Romano, PO2 Tom Plants or PO3 Bill Amspacher, survived. As related by former squadronmembers, McMican's first and middle names were the single letters "M" and "D." His name is recorded as such on the Vietnam Memorial in Washington, D.C., and on the official POW/MIA list.

Tom Plants at age 25 was considered one of the "old guys" on the det. Amspacher had just extended in order to return home right after his 21st birthday — he had been looking forward to being able to buy beer legally back in Alameda.

Operational losses also took their toll. On 20 June 1966, EA-1F 135010 suffered a "cold cat" off *Hancock's* bow. The aircraft settled into the water and was run over by the ship. Two of the three aboard were able to escape though the pilot, LT John McDonough, did not. It was the first of two successful ditchings for Robert Carlton, who also rode sister Spad 132543 into the water on 10 September 1966 while flying from *Franklin D. Roosevelt* (CVA-42) in the Gulf of Tonkin. All four in this incident were recovered by an Air Force HU-16 *Albatross* amphibian (see sidebar).

In another incident, this one on 14 February 1968, a VAW-13 Spad was flying with a VA-25 A-1H on a ferry flight from Cubi to the Gulf when they were jumped by Chinese F.9s (MiG-19s) off Hainan Island.



Left: EKA-3B Skywarrior at sea with CVW-5/ Midway (CVA-41), c. 1970. The blisters on the side of the aircraft contain transmitter antennae for the ALQ-92 VHF jamming system. **Left, below:** A pod of Whales on the ramp at NAS Alameda, 1969. The first three aircraft, all EKA-3Bs, were assigned to USS Oriskany's (CVA-34) Det 34 and will receive CVW-19's "NM" tailcode as they embark. The fuselage stripes indicate the first, second and third det aircraft, useful to help identify specific tankers when large gaggles of strike aircraft take fuel. The aircraft on the far right is a KA-3B.

USN



The Whale Cometh

The electronic warfare business is not a static enterprise, and the North Vietnamese continued in quantity and quality to improve their air defense capabilities. In response, each of the Armed Services developed and fielded improved radar jamming platforms to provide greater protection for strikers. By 1967, the Marines' EF-10B *Skyknights* were being phased out in favor of new Grumman EA-6A *Intruders*, and the Air Force converted more B-66 *Destroyer* light bombers into EB-66Es. While the Navy had a new design in the works that would be a derivative of Grumman's A-6 *Intruder* medium attack aircraft, it needed an interim type to carry the load until the new bird was ready. By 1966 work had begun to modify the A-3B *Skywarrior* heavy attack aircraft into a jammer to fill the bill.

The "new" EKA-3B first flew in April 1967. It carried within the fuselage a bank of ALT-27 and ALQ-92 jammers that covered relevant portions of the electronic spectrum being used by the enemy over North Vietnam. The work was done at Naval Air Rework Facility Alameda and, once complete, the newly modified aircraft were towed a relatively short distance to the VAW-13 ramp to replace the *Queer Spads* parked there.

Needless to say, the A-3 was a huge change from the A-1. While the trusty Spad launched at about 24,000 pounds, the mighty Whale took cat shots at as much as 73,000 pounds. Top speed increased from about 350 knots in the Spad to more than .85 Mach, and max altitude was now in excess of 35,000 feet. This quantum leap required new training, new crews and a major reorganization of the carrier-based EW business.

As 1966 drew to a close, the Navy's existing Whale community was centered at NAS Whidbey Island in the form of five heavy attack (VAH) squadrons that were primarily carrying out the tanker mission with A-3Bs. The rest of the Navy's jet HAtRons, located at NAS Sanford, had recently converted to the RA-5C *Vigilante*.

The *Zappers* conversion caused more than a bit of confusion. Al Rankin, a young sailor fresh from boot camp in December 1966, was hard at work in airframes/hydraulics A-School at Memphis when he found out he was headed to VAW-13 via the A-3 RAG in Whidbey. His instructors scratched their heads and told Rankin that it *had* to be wrong — VAW-13 was a prop squadron, and everybody knew that.

Nonetheless, Rankin went to VAH-123 at Whidbey where the folks there reported that at least they'd heard rumors about the transition, but didn't know a whole lot more. AN Rankin, working diligently to complete the

training in the *Skywarrior*, was probably the first whitehat to be ordered to Alameda via Whidbey.

Rankin, arriving in the Bay Area in midsummer, had to wait for the first A-3 to show up on the *Zappers'* ramp. Once the aircraft arrived, Rankin turned to help integrate the Whale into its new task. He also went on the first cruise with it. Rankin would make two more trips with the *Zappers* as well as several with VAQ-134. Qualified as a flight-deck troubleshooter and eventually earning his turn-up quals, he made several flights in the A-3 before leaving the service in 1970 as a metalsmith second-class.

The *Zappers* introduced the newly modified Whale into fleet service in November 1967 as *Detachment 61* deployed in *Ranger* (CVA-61). The det's three EKA-3Bs shared the



Carroll Beeler was a *Zappers* JO pilot during the transition between EA-1F Spads and EKA-3B Whales. He was also an LSO and later made the transition to fighters and the F-8 *Crusader*. As such, he's uniquely qualified to comment on the peculiarities of the *Zappers*' aircraft:

"The EA-1F was straightforward to wave, except you couldn't let them take a normal Spad 'high dip.' In the straight Spad, it was considered pretty normal for the LSO to cut you onto a No. 1 wire. The Fat Spad, though, had a higher gross weight, so that you watched for [the high dip] and didn't let a guy get away with it. The bigger problem was with the guys from straight Spads who did a high dip out of habit. I remember one LCDR who broke the back on two *Robbie*'s in one day.

Waving the Electrics

by Carroll Beeler

"The Whale was snotty on line-up. You didn't let it drift left in close. A 'right for line-up' could get a small PIO [pilot induced oscillation] that would get the hook swinging, and a 'Whale Dance' in the wires would result. In the extreme, you could get an inflight [arrestment] that would catch both nacelles/wingtips and maybe a nose tire on the same trap. I remember one or two of those.

"The mishap rate went high in about 1967. The pilots assigned to VAQ-130 EKA-3Bs were from all over the scale. One I remember was a CH-46 pilot who trapped, stopcocked the engines in the wires and walked away. Another was a 19-year lieutenant commander whose last traps were 18 years earlier in the SNJ on a straight deck. He had been flying C-54s or something.

"As I remember it, the EKA-3B came aboard at 55,000 pounds. The airplane was 50,000 pounds empty; therefore, 5,000 was max-trap fuel

load. Minimum fuel was 3,500, which left 1,500 pounds at about 600 pounds per circuit, which lead to some pucker factor when the Tanker was the last guy aboard.

"The Whale had some unusual characteristics. It was quirky if it was a CLEO [cambered leading edge] verses a basic-wing configuration. You knew the power setting was about right if the J57 hurt your ears in close. The J57 had bleed valves that could get sticky and caused directional wiggles. Having said all of that, it continued to operate for another 20 or more years. It was OK, it was big, it was thrown into a dual mission and was what we had at the time. Its mishap rate got better later.

"On a 27C, the wing tip was right over the LSO's head. I have been in the net with an OCLUIC [overcontrolled line-up in close] where he came back at me. I pitched the pickle switch and the wing tip picked it up and ripped it out of the console. I have it as a keepsake.

"My first day in VF-24 on *Hancock* (CVA-19), deployed and briefing for first flight, the outgoing LSO and I are in the ready room. I said, 'That looks like a ramp strike.' It was five big pieces, flight deck fire, ejection into the island with major injuries. Evacuated the ready room. All clear. Back to the ready room.

"Man-up for Event Five,' Chuck Singler says. 'You got any questions about HFNEPDNIC [high and fast, not enough power, drop nose in close] and BLC on a hot day in an F-8?'

"I said something like 'Nope.' He shook my hand and said, 'Welcome aboard — you got it.'"

Carroll Beeler was shot down over North Vietnam on 24 May 1972 while flying an F-8J for VF-24 from *Hancock*. He was one of at least three former *Zappers* who spent time in the North as POWs after moving on to other aircraft. LT Tom Latendresse was bagged while flying A-4Fs for VA-55 off the "Hannah" three days after Beeler. The third was LCDR Arv Chauncey, who was hit by AAA while in a VA-212 A-4E off *Bon Homme Richard* (CVA-31) on 31 May 1967. All three returned to the U.S. in 1973.

deck with a pair of KA-3Bs from Heavy Two. At least initially, the mixture of Alameda EKAs and Whidbey KAs would become the norm for the "big decks" while the smaller 27Cs would usually have only three EKAs assigned. This mixing of units would last for only about a year until the Navy finally sorted out its airborne jamming community.

The Birth of the TacElRon

By early 1968 the service had come to the conclusion that the electronic warfare business was no longer to be considered a subset of the airborne early warning field. At NAS Quonset Point on 1 February, VAW-33, a Queer Spad outfit, became the Navy's first tactical electronic warfare squadron, or TacElRon. As such, it was given the prefix VAQ, as in VAQ-33. Following suit, the *Zappers* were redesignated VAQ-130 on 1 October 1968.

The Navy next elected to expand its newest warfare specialty to six squadrons, five to be equipped with five *Skywarriors* and deployed as complete units. The sixth, VAQ-130, continued as a detachment outfit. In 1968, two Whidbey-based heavy attack units, VAH-2 and VAH-4, were redesignated VAQ-132 and -131, respectively, and moved to Alameda to receive their EKA-3Bs.

Finally, on 1 September 1970, Whidbey-based VAH-10 and its two underway detachments were redesignated VAQ-129. Remaining in Washington state, the squadron's new 120-series number indicated that there were other plans for this particular unit.

A functional wing, VAQWing 13, was established at Alameda on 1 September 1968 to oversee administrative, operations and maintenance support for the new Whale community. The wing was assigned the "TR" tail code, and it soon began to appear on aircraft at Alameda, either on VAQ-130 "home guard" birds or on the aircraft of other squadrons between air wing assignments.

Since the introduction of the EKA-3B, the *Zappers* had conducted an electronic warfare operator's course of instruction for Alameda squadrons' Naval Flight Officers. The *Zappers*' critical role in the A-3 community was strengthened in February 1971 when the squadron took over the mission as the *Skywarrior* fleet replacement squadron from VAH-123, which was disestablished in Whidbey on 1 February 1971. Three seven-seat TA-3B *Skywarriors* were transferred to VAQ-130 to carry out this instructional mission, and the squadron's output for the first year was 29 Naval Aviators and 40 NFOs.

Whales at Sea

Over the next six years, the *Zappers* would support 26 Whale dets at sea on board 14 different carriers. These decks ran the gamut from the small 27C modified-*Essex*-class to the Navy's newest, *John F. Kennedy* (CVA-67). Twenty-three of these deployments went to the Pacific and three deployed to the Mediterranean, the first of these being in *Franklin D. Roosevelt* (CVA-42) with CVW-6 in 1970.

Back home stories began about Whales and have persisted through the years. Tales run the gamut from aircraft flying under bridges in the Bay Area to one about the A-3 that tried a touch-and-go on Interstate 80 in Nevada. Although never officially confirmed, the story ends with



Coming home following a mission over the Northern Tonkin Gulf is a Constellation (CVA-64)-based VAQ-130 Det 1 EKA-3B, 15 Jan '72.

reports that the Nevada State Police found two skid marks on the freeway that were about ten and a half feet apart, the same as the tread width listed for the *Skywarrior* in NATOPS.

It was in the skies of Southeast Asia where the EKA-3B really earned its keep. During the height of operations in 1968-'69, the squadron operated as many as four separate sea-going detachments in the Vietnam theater as well as others working up — all this in addition to FRS duties back home. During Fiscal Year 1969, the *Zappers* and its far-flung dets racked up 12,347 hours and logged 3,523 carrier landings. More than half of the total hours were on combat flights in Vietnam.

Combat missions for the Whale usually entailed double-cycle events, with tanking normally occupying the first part of the flight. With about 20,000 pounds available to give away, the Whale was frequently launched first to serve as a departure tanker before moving outbound to its jamming point. Targets usually included the same fire control radars that the EA-1s had dealt with, (with the Whales providing considerably more power) as well as the low frequency *Spoon Rest* early-warning radar that was being used to acquire targets for the SA-2s *Fan Song*. *Bar Lock* GCI radars were also fair game as the North Vietnamese electrical order of battle became more complex.

Although fast, the aircraft was not particularly survivable in MiG- and SAM-filled skies, so it was restricted to operations over water as it supported strike missions going over the beach. On occasion, aircraft accompanied reconnaissance flights into Laos to cover them. Jamming orbits were typically at between 18,000 and 20,000 feet (twice as high as the Spads they replaced) and usually no closer than five miles from the beach — and even further when SAMs were located near the coast. There were occasions, though, when strikers coming off the target would scream for fuel. Whenever possible, the Whales headed feet dry, but only on a strictly "as required" basis.

The "wet wing" tanker method was perfected by Whale crews, in which the refueler pumped fuel into a wounded aircraft almost as fast as it poured out of a holed wing. "Dragging" the stricken striker back to the carrier at least gave the pilot a chance to recover on board or eject near the fleet. Over the next few years, more than a few low-fuel aircraft owed their successful return and recovery on board to an A-3 crew that pressed the odds to pump gas to an aircraft in *extremis*.

Tom Kissinger was an NFO who joined the squadron in September 1968. He went on to make two deployments in *Ticonderoga* and *Bon Homme Richard* (CVA-31). He characterized the squadron as being the kind of place where you were constantly meeting new people, even though some of the "new" guys had been there as long as you had.

"We were constantly being moved around, and dets rarely had a chance to carry out full work ups with their air wings. The squadron was in constant movement and there were some people in the command you might never meet." Tom states that combat operations varied from boat to boat and depended on what was going on in the war. On his first cruise most of the missions were flown from the carrier, but more than half from "Bonnie Dick" were actually out of Da Nang.

"We'd take off from the beach, run to the carrier, be overhead while they launched, tank the strike package, run to our jamming station, support the strike, get back overhead the carrier, hawk the recovery pattern, consolidate with the oncoming tanker and then buster back to Da Nang to hot fuel and hot switch with another crew. All of this in only two or three hours."

The EKA's crew was normally three, a Naval Aviator and two Naval Flight Officers. The right-seat NFO functioned as a navigator/tanker controller while the other, serving as the primary ECM operator, sat back-to-back with the pilot in the former flight engineer/gunner's seat.

Two *Zappers'* Whales would be lost during Vietnam, both as a result of operational mishaps. On 18 June 1971, a Det Three aircraft (BuNo 147649, *NM 619*) was lost with its crew of three in the Gulf of Tonkin after it lost control following what one witness described a "spectacular" disengagement from a refueling. LT John R. Painter, LTJG Raymond V. Deblasio and ADJ2 Barry A. Bidwell were killed in the mishap.

Det Four would also lose an aircraft (BuNo 142634), this on a failed cat shot on 21 January 1973 from *Ranger*. LCDR Charles L. Parker, LTJG Keith A. Christopherson and AT2 Richard D. Wiehr were killed only one week before "peace" was declared in the Vietnam War.

The Whale's Replacement Appears

Even as the EKA-3B was hitting the fleet, its replacement was well into the planning stages. Grumman had developed an electronic warfare version of its A-6A *Intruder* that was to become the EA-6A. First deployed with the Marines as a replacement for their EF-10s, the "Electric *Intruder*" became what was arguably the most capable EW platform in Vietnam up to 1972.

Back on Long Island, Grumman was designing the "station wagon" version of the EA-6A by adding several feet and two more seats to the basic A-6 design. The result was the EA-6B, which would retain the *Intruder* title until it was given the familiar *Prowler* name in 1971. AirPac planned to introduce the new aircraft into a replacement squadron by 1971, a decision that prompted the question where to base the new type. The wing lobbied to bring the Electric *Intruder/Prowler* to the Bay Area, arguing that the EKA's successors should be based at the same location. It wasn't to be.

NAS Whidbey Island was selected for a number of reasons. Among the most important, there was room there.



Hancock's (CVA-19) catapult officer prepares to send more than 35 tons of EKA-3B down the No. 1 cat, 1968-'69 deployment. VAW-13 Det 19 was redesignated along with the home squadron to VAQ-130 on 1 Oct '68.



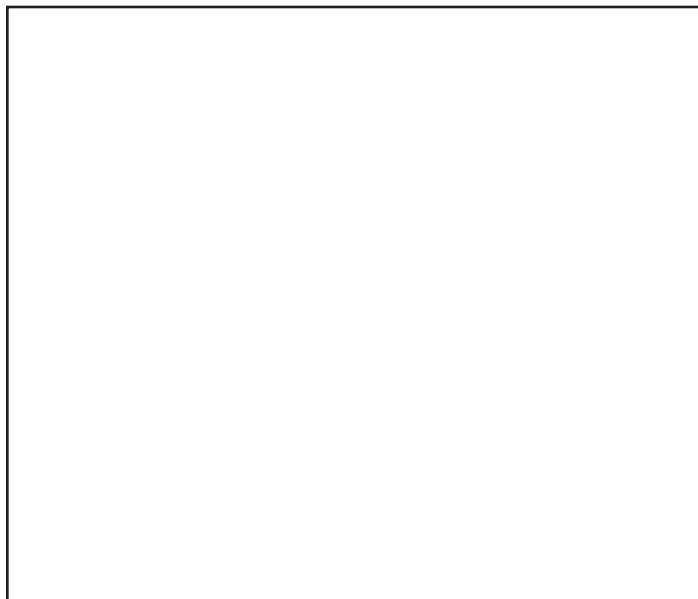


Left: In what proved to be the last line period for the EKA-3B, a Zappiers Det 4 Whale taxis forward for launch from Ranger (CVA-61) in the SoCal OpArea, 1974. **Left, below:** NF 032 spreads its wings and vertical stabilizer as it approaches Bon Homme Richard's (CVA-31) No. 2 catapult on the carrier's 1968 Vietnam war cruise. The A-4F, a Rampant Raider from VA-212, is armed with Mk 82 bombs and Zunis.

USN



Reductions in Whidbey's heavy attack and patrol communities meant ample ramp space was available. The Pacific Fleet A-6s were already located there, which gave at least some sense of "like types" at one location. And there were other benefits as well. Whidbey had OLF Coupeville, a bounce field located close by, and the area featured almost unlimited airspace and operating areas nearby, particularly when compared to the crowded California scene.



VAQ-129, already numbered after the other AirPac 120-series fleet replacement squadrons, became the *Prowler* RAG, and the recently established California EKA-3 squadrons began their move northward for the transition to the new aircraft type.

Community transition was quick, and by mid-1973 there were four *Prowler* squadrons deploying (VAQs-131 through -134). Meanwhile, the *Zappiers* still fielded five Whale dets, two of which had transferred to VAQ-130 mid-cruise from VAQ-135 when the latter had folded its tent and headed for Whidbey. By February 1974 the *Zappiers* were the only active-duty Whale squadron left in the Bay Area. *Zappiers* Dets One, Two and Five came home from *Independence*, *Coral Sea* and *Hancock* and disestablished on arrival. That left two Whale dets remaining — Dets Three and Four. The end was rapidly approaching for the EKA-3B in fleet service.

Det Three, which came home from WestPac with *Oriskany* in June 1974, was the last of the *Zappiers*' Whale deployments and the final extended deployment for a bomb-bay-configured A-3 unit. Det Four, which had worked up with CVW-2 and *Ranger*, would be pulled from the cruise just prior to its departure. *Ranger* left in May 1974 and proceeded to WestPac without VAQ support. At Alameda, *Skywarrior* RAG duties were passed to the local Naval Air Reserve Unit to support their two KA-3B squadrons as well as active-duty units VAQ-33, VQ-1 and VQ-2.

For VAQ-130, it was time to move to the Great Northwest and change aircraft. The *Zappiers*' Whale era, together with their stay in California, had come to an end.



Next issue: Part II: A Quarter Century of Prowling

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Ed. Note: LCDR Rick Morgan, USN(Ret), is The Hook's resident EW writer and has twice won the magazine's Top Contributor award. This is his 38th byline in the magazine. Rick currently resides in Woodbridge, Va.

