The Truculent Turtle's Excellent Adventure

By CAPT Victor S. Gulliver, USN (Ret.)

November 14, 1910 is considered by many to be the birth date of Naval Aviation. On that date, Eugene Ely made the first take-off from the USS *Birmingham,* landing ashore minutes later near the future site of NAS Norfolk, Virginia. Exactly 100 years later, the VP-2 Association informed the National Naval Aviation Museum in Pensacola, Florida of its intention to sponsor the most historically significant patrol aircraft ever flown, the Museum's P2V-1, the Truculent Turtle. Sponsorship of the Truculent Turtle entails funding for restoration and future upkeep of this historic aircraft, which was once assigned to the squadron. Learn more about this sponsorship at www.patron2.com.

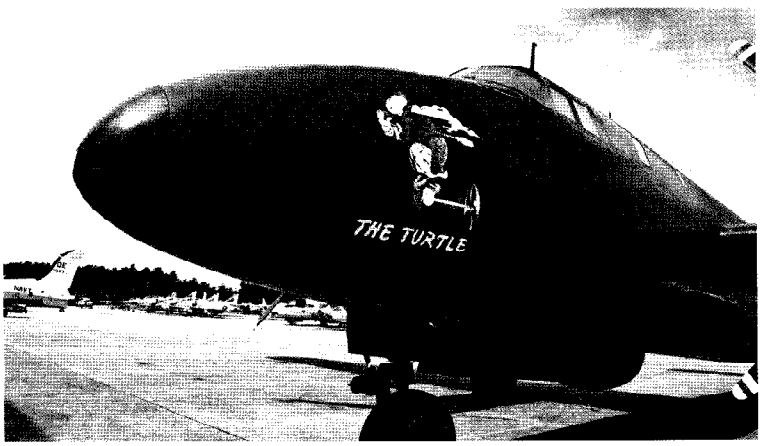
The VP-2 Association is an organization of veterans (and their spouses/children) who served in VP-2. Nearly six-hundred former squadron members have joined the VP-2 Association over the years; many are now deceased. Some may recall that the VP-2 Association created the Whidbey Patrol Squadron Memorial in 2006 that now stands in Veterans' Memorial Park in Oak Harbor, Washington to honor those who served and those who died in patrol squadron operations while based at NAS Whidbey Island, Washington.

For those not familiar with the exploits of the Truculent Turtle, we call upon several sources of information from more than 60 years ago. CDR Walter Reid, wrote an article for *Popular Mechanics* magazine in December 1946, giving his first-hand account as a member of the Turtle's four-man crew. CDR Edward Stafford wrote an article for the U.S. Naval Institute's *Proceedings* in 1991 based on his gathering of interviews and reports from that era. Both of those magazine articles are available on www.vpnavy.com and were used to recreate the events of 1946 in this *Wings of Gold* article.

In a nutshell, the Truculent Turtle's crew set a long-standing world record for non-stop, unrefueled flight by flying from Perth, Australia to Columbus, Ohio, a distance of 11,236 miles over a span of 55 hours and 17 minutes. They did it in 1946, without GPS, without computers, without inertial navigation systems, without satellite communications.

Before the Flight

At the close of WWII, the Navy was left with several types of aircraft that were doing duty in the patrol, reconnaissance and surveillance roles. The PV-1 Ventura and the PV-2 Harpoon, along with the PBY and PBM seaplanes, were important mainstays of the war. The Navy tried to convert some aircraft for patrol use that had been introduced by the Army Air Forces (AAF), the forerunner of the U.S. Air Force. Maritime versions of the B-25 and B-17 were discounted as unsuited for the many roles of a patrol squadron. The PB4Y Liberator, a variant of the AAF B-24, saw some use as a patrol plane and served well in several Navy patrol squadrons. But, at the end of WWII, the Navy knew that it needed a new design for a faster, more capable long-range patrol aircraft.



Truculent Turtle before its restoration.

During WW II, the AAF proved to the world that land-based aviation in the form of long-range bombers was a strategic necessity for success in wartime. The strategic bombing role that the AAF undertook in Europe brought Germany and Italy to its knees, although our losses of AAF crews and aircraft were tragic and previously unimaginable. At the end of the war, the AAF's new B-29, which was the fastest and highest flying bomber of WWII, was noted for delivering the first and only nuclear weapons used in wartime when it dropped its devastating bombs on Hiroshima and Nagasaki.

Soon after the war there was a move underway to make the AAF a separate military service. The AAF wanted its independence from the Army and wanted separate-service status with its own Department and Secretary like the Army and Navy. There was also an effort by the AAF to enlarge its scope of responsibility by attempting to take over the Navy and Marine Corps air arms. The AAF had so proved its worth in WWII that it gained political support for taking control of all U.S. military air resources including those of the Navy and the Marine Corps. The AAF aspired to be the U.S. Air Force with ownership and control over all assets that flew. They would allow the Navy to have its aircraft carriers, but they wanted the carrier airplanes to be Air Force airplanes.

In 1946, there was a tremendous downsizing of our military forces. All of the services were required to reduce their personnel and equipment to peacetime levels. Ships, squadrons, and battalions of troops were disestablished. Money to be spent on defense became scarce, and the services began to compete for available dollars. There began a "roles and missions" squabble among the services, with each service staking out its perceived role in warfare and seeking the funds necessary to support that role with people and weapons. It soon became clear that a battle was underway between the Navy and the AAF to determine which service should have the role of maritime air patrol. The AAF was touting its B-29 as the longest range, most capable aircraft to do that job. The Navy was waiting for its new patrol aircraft to come off the production lines... the P2V.

In June 1946, Lockheed began delivery of its new P2V-1 aircraft. Since the cost of the P2Vs represented a sizeable portion of the Navy's budget, and owing to pressures from the AAF to take over the role of maritime air operations, the Navy's Chief of Naval Operations, Fleet Admiral Chester W. Nimitz wrote a memo to Secretary of the Navy, James V. Forrestal. Nimitz suggested the following:

"For the purpose of investigating means of extension of present patrol aircraft

Planning the historic flight. Left to right are LCDR Roy Tabeling, CDR Tom Davies, CDR Eugene Ranking and CDR Walter Reid.

Flight crew at Perth. Left to right, CDRs Davies, Rankin, and Reid and LCDR Tabeling.

ranges, physiological limitations on patrol plane crew endurance and long-range navigation by pressure pattern methods, it is proposed to make a nonstop flight of a P2V-1 aircraft from Perth, Australia to Washington, D.C. with the possibility, weather permitting, of extending the flight to Bermuda."

Left unsaid in ADM Nimitz's memo was the fact that the intended route would exceed the distance record set the year before in which a B-29 had flown non-stop from Guam to Washington, D.C., a little over 7,500 nautical miles. There were also rumors that the AAF was planning a more ambitious record-setting flight across the North Pole from Hawaii to Cairo, Egypt, a trip of some 9,000 nautical miles.

Preparing to Set a Record

Despite its many performance attributes the P2V-1 aircraft were not capable of the flight proposed by ADM Nimitz. Much work needed to be done to a P2V to enhance its long-range endurance before the record-setting flight could be attempted. One of the first P2V-1s was diverted from its intended assignment with VP-ML-2, a forerunner of VP-2. Bureau Number 89082 was pulled off the Lockheed, Burbank production line and converted to make the flight. Aircraft weight was a driving factor and anything that wasn't needed for the flight was removed to make room and weight for added fuel. Off came the turrets, guns, the main oxygen system, cabin heaters, some radio equipment, and the anti-icing and deicing systems.

A 926 gallon fuel tank was installed in the nose. A 2,082 gallon tank was installed in the aft fuselage; even the sonobuoy launching chute was replaced with a 128 gallon fuel tank. Ejectable tip tanks holding 200 gallons each were mounted on the wings. A 2,132 gallon fuel tank was installed in the bomb-bay. There was an estimated 140 gallons of fuel in the fuel lines connecting all the tanks. Extra fuel cells were installed in voids in the outer wings. In total, the plane could hold 8,592 gallons of fuel, more than 5,000 gallons beyond that of a production P2V. For the long-range flight, an additional oil tank was installed below the cockpit that carried 370 gallons of oil for the two Wright Cyclone engines, each of which already had its own 90 gallon oil tank. As planned for the record attempt, the plane would be nearly 13 tons over its normal maximum takeoff weight. The plane was named "The Turtle," after the Lockheed project to study the extension of the P2V-1's range, Operation Turtle.

Truculent Turtle at Perth.

Concerned about the weight of the aircraft at takeoff, the engineers built an emergency fuel dump system that featured a ten inch diameter aluminum pipe in the fuselage that could be coupled to a three way valve leading to the nose, bomb-bay and aft-fuselage tanks. The pipe, which poked through the belly aft of the bomb-bay, could dump 800 gallons of fuel in the first 20 seconds and 5,200 gallons in six minutes.

By late summer 1946 all planning and modifications had been completed. Navy crews and Lockheed personnel repositioned from Burbank to Perth, Australia, hoping to take advantage of summer's prevailing tailwinds for the record-breaking attempt. Perth's Pearce Aerodrome, with its 6,000 foot runway, would be the takeoff point. With favorable weather forecasts, the decision to go was made on September 29th.

The Flight of the Turtle

Taxiing tests had shown that the P2V-1 landing gear might not be able to handle the extreme weight of the Turtle, and that the landing gear struts and tires could fail in turns under such weight conditions. For that reason, the Turtle was only partially filled with fuel before it was positioned at the head of the Pearce Aerodrome runway. Lined up for takeoff, the fuel tanks were filled to capacity. At the same time, JATO packs were attached to the fuselage for the jet-assisted take-off that would be needed to get the Turtle off the ground.

The Turtle would fly with only four men aboard. CDR Thomas D. Davies would be the pilot in command with CDR Eugene P. Rankin as his copilot. CDR Walter S. Reid and LCDR Roy A. Tabeling acted as relief pilots as well

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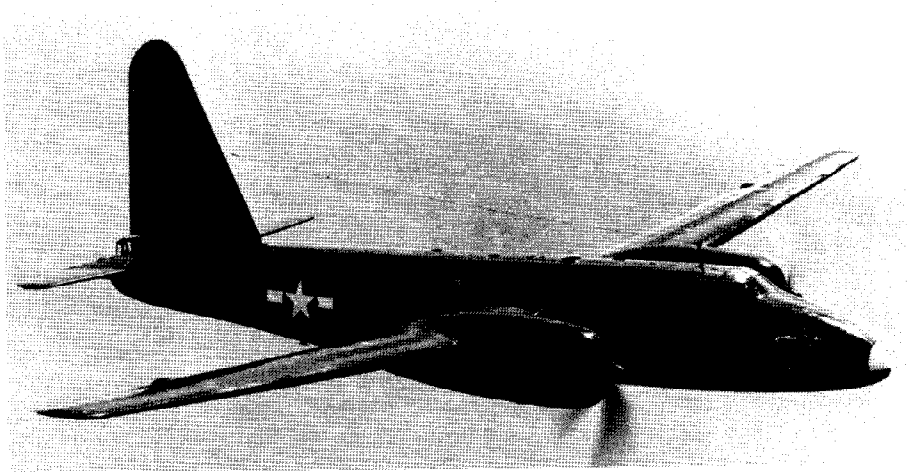
as handling navigation and the radios. A last minute addition to the crew was Joey, a 35 pound, nine-month old gray kangaroo, which was to be a gift from Australia to the Washington D.C. Zoo. In CDR Rankin's own words:

"Late afternoon on the 29th, the weather in southwestern Australia was beautiful. At 1800 the two 2,300 hp Wright R-3350-8 engines were warming up. We were about to commence a takeoff from a 6,000 foot runway at a gross weight of 85,561 pounds (the standard P2V was rated at 61,000 pounds), of which about 50,000 pounds were gasoline.

Sitting in the copilot's seat, I remember thinking about my wife, Virginia, and my three daughters and asking myself, "What am I doing here in this situation?" I took a deep breath and wished for the best, knowing the takeoff would be the greatest risk of the entire flight."

CDR Tom Davies held the brakes as the throttles were pushed forward to maximum power. At the other end of the mile-long runway he could make out the many news reporters and photographers. In sight of the runway were hundreds of picnickers who came to witness the spectacle of a JATO takeoff, and who stood when they heard the sound of the engines being advanced to maximum power. Tom Davies and Gene Rankin scanned the engine instruments, which all showed normal settings. Davies released the brakes and the Turtle reluctantly began to roll. On this day, September 29, 1946, the Turtle was a veritable winged gas tank that was more than thirteen tons over maximum gross weight.

The Turtle rumbled and bounced on its tires that had been over-inflated to handle the heavy load. Slowly it began to pick up speed. As each 1,000-foot sign went by Rankin called out the speed and compared it to predicted figures on a clipboard in his lap. When the quivering airspeed needle touched 105 knots, Davies punched a button wired to his yoke, and the four JATO bottles fired from their attachment points aft on the fuselage. The crew could hear the roar of the JATO bottles and feel their push. For a critical ten seconds they provided the thrust of a third engine. The 4,000 foot sign and 115 knots came up at the same time, and Davies pulled the nose wheel off. There were some long seconds while the main landing gear continued to rumble on the last of the runway. Then the rumbling stopped as the main landing gear left the runway and the full load of the aircraft shifted to the wings.



Turtle in flight, without wingtip tanks.

As soon as they were certain they were airborne, but still only a few feet above the ground, Davies called "gear up." Rankin moved the wheel-shaped actuator on the pedestal between the pilots to the up position. If he remembered to do so in all the excitement, CDR Davies likely tapped the brakes to stop the wheels from spinning before the wheel-well doors closed, just as the JATO bottles burned out. In the aft fuselage, CDR Walt Reid kept his hand on the dump valve that could quickly lighten their load in an emergency. LCDR Roy Tabeling, at the radio position, kept all his switches off to prevent the slightest spark.

The emergency procedures for a failed engine had been well thought out, but were never needed. At their takeoff weight the crew estimated they would be able to climb at a maximum of 400 feet per minute. If an engine failed and they put maximum power on the remaining engine, they would be forced to descend at 200 feet per minute. Their planning indicated that if they could achieve 1,000 feet before an engine failure they would have about four minutes in which to dump fuel to lighten the load and still be 200 feet in the air to attempt a landing. With their built-in fuel dump system they were confident they were in good shape at any altitude above 1,000 feet because they could dump fuel fast enough to get down to a comfortable single-engine operating weight before losing too much altitude.

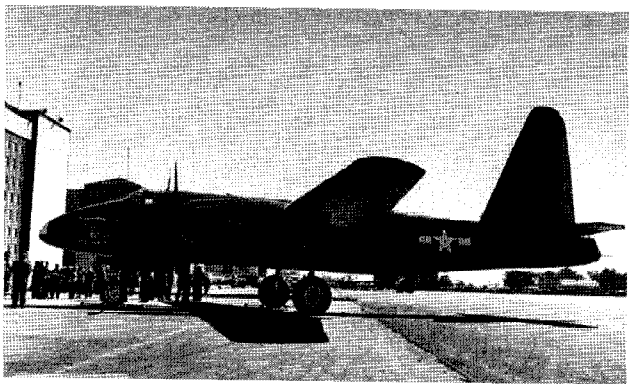
Departing the Aerodrome boundary on a southwesterly course, the Turtle flew out over the waters of the Indian Ocean. With agonizing slowness the altimeter and airspeed crept upward. CDR Reid jettisoned the empty JATO bottles. At 125 knots, stall speed with the flaps up, CDR Rankin started bringing the flaps up in small increments. At 165 knots, with the flaps fully retracted, CDR Davies made his first power reduction back to the maximum continuous setting. The sun was going down and the lights of the city were blinking on as the Turtle circled back over Perth at 3,000 feet and headed out across the 1,800 miles of the central desert of Australia. On this record-breaking night, one record had already been broken. Never before had two engines carried so much weight into the air.

The plan was to stay fairly low... about 3,500 feet...for the first few hundred miles, burning off fuel and reducing weight so the eventual climb to a higher cruising altitude would require less gas. But the southwest wind, burbling and eddying across the hills northeast of Perth, brought turbulence that shook and rattled the overloaded Turtle, threatening the integrity of the wings themselves. Davies took the Turtle up to 6,500 feet where the air was smoother, reluctantly accepting the sacrifice of enough fuel to fly an extra couple of hundred miles at the other end of the flight.

They crossed over Alice Springs at Australia's center at midnight, and over Cooktown on the northeast coast at dawn. Then it was out over the Coral Sea where, only a few years before, the *Lexington* (CV-2) and *Yorktown* (CV-5) had put down the Japanese ship *Shoho* and turned back *Shokuku* and *Zuikcaku* to win the first carrier battle in history and prevent the cutoff and isolation of Australia. Within 24 hours and almost 5,000 miles, the Turtle would pass near the site of the Battle of Midway, which changed the course of WWII in the Pacific only a month after the Battle of

the Coral Sea.

At noon on the second day, the Turtle was over southern New Guinea, and in mid-afternoon detoured around a mass of boiling thunderheads over Bougainville in the Solomons. As the sun set for the second time since takeoff, the Turtle headed out across the vast Pacific Ocean, and the crew began to establish their "at sea" routine. They stood two-man, four-hour watches, washing, shaving, and changing to clean clothes each morning, and eating regular meals cooked on a hot plate. With the engines running smoothly, the crew's only worry was Joey the kangaroo, who hunched unhappily in her crate and refused to eat or drink.



After an uneventful all-night flight over the south Pacific, their second morning in the air found them over Maro Reef, halfway between Midway Island and Oahu in the long chain of Hawaiian Islands. Because some of the long-range radio equipment had been removed from the aircraft for this flight, the Turtle had been out of radio contact with anyone for more than 18 hours. In the very first voice-radio contact of the flight, Honolulu Radio warned of icing and severe turbulence over Seattle, the Turtle's planned landfall in the United States. CDR Davies changed course to hit the coast in northern California, dropped, the empty wing tip tanks, and cased up to 10,000 feet. At noon, CDR Reid came up to the cockpit smiling. "Well," he reported, "the damned kangaroo has started to eat and drink again. I guess she thinks we're going to make it."

Top, Truculent Turtle after landing in Columbus, Ohio. Above, celebrating their achievement , left to right, are LCDR Tabeling, CDR Rankin, CDR Reid and CDR Davies.

So far, the flight had gone according to plan. But now as the second full day in the air began to darken, the Pacific sky, gently clear and blue for so long, turned rough and hostile. An hour before landfall, the Turtle encountered increasing cloud cover and heavy turbulence. The plane bounced and vibrated. Ice crusted on the wings. Static blanked out radio transmissions and reception. It was midnight before Roy Tabeling succeeded in making contact with the ground, requesting an instrument clearance eastward from California. A delightfully female voice reached up through the murk from Williams Radio, 70 miles south of Red Bluff, California.

"I'm sorry" the voice said. "I don't seem to have a flight plan on you. What was your departure point?"

"Perth, West Australia."

"No, I mean where did you take off from?"

"Perth, West Australia."

"Navy Zero Eight Two, you don't understand. I mean what was your departure airport for this leg of the flight?"

"Perth, West Australia."

"But, that's halfway around the world!"

"No. Only about a third. May we have that clearance?"

They experienced hours of St. Elmo's fire that was annoying but not dangerous. Now came a serious threat to the mission. The tachometer for the left engine began oscillating, indicating a failure of the engine. In the jarring, crackling night sky somewhere over Nevada, CDR Davies suddenly had much to ponder. Navy and civil flight regulations and common sense required an immediate landing at the nearest available field in the event of engine failure. But, where was that? Probably Reno, but would that field be open, or did the present foul weather extend all the way to the deck? And what about the mission record? The Turtle was 9,000 miles from Perth, but was that good enough? The Neptune was light enough for single engine flight, but how much farther could it go on one engine? As CDR Davies reached up for the feathering button, it occurred to him that something about this sick engine just wasn't right. They hadn't lost any airspeed or altitude. The other instruments for the left engine were all normal. He ran the throttle of the left engine forward and felt a welcome swerve. The left engine was as good as ever. Only the tachometer had failed.

Somewhere near Ogden, Utah weather became a serious factor. Freezing rain, snow and ice froze on the wings and fuselage, forcing the crew to increase power to stay airborne. The aircraft picked up a headwind and an estimated 1,000 pounds of ice, which was problematic since the plane's deicing and anti-icing equipment had been removed as a weight-saving measure. The three

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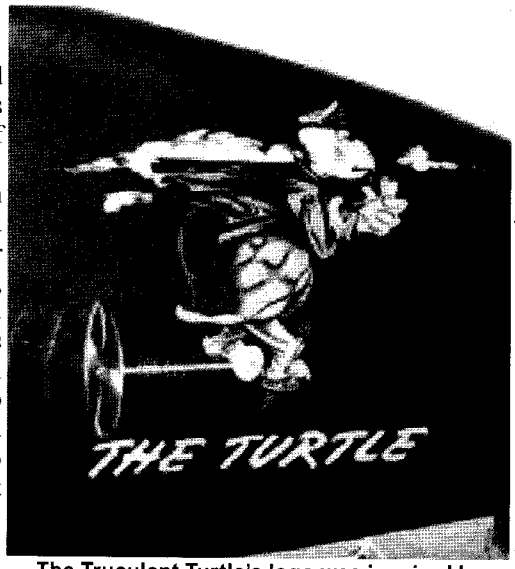
hours of higher power settings and increased fuel use at 13,000 feet was estimated to have cut about 500 miles of distance from the flight.

The weather finally broke at dawn of the Turtle's third day in the air. All morning CDR Davies tracked their progress eastward over Nebraska, Iowa, and the Missouri and Mississippi Rivers. To the north, the haze of Chicago was in sight. But now, not surprisingly, fuel was becoming a problem. The wingtip tanks had long ago been emptied and jettisoned over the Pacific. The bomb bay tank, the nose tank and the aft fuselage tanks were empty. The fuel gauges for the wing tanks showed little remaining fuel.

CDR Davies and his crew consulted, calculated and recalculated their remaining fuel, and cursed the gauges on which one-eighth of an inch represented 200 gallons, more than an hour's flight. At noon they concluded that they could not safely stretch the flight all the way to Washington, D.C., and certainly not to the island of Bermuda. CDR Davies chose the Naval Air Station at Columbus, Ohio to be their final destination.

At quarter past one that afternoon the runways and hangars of the Columbus airport were in sight. The Turtle's crew were clean-shaven and in uniform. And the fuel gauges all read empty. With the landing checklist completed and wheels and flaps down, Davies turned the Turtle onto final approach. As the plane leveled out on final, the left engine popped, sputtered and cut out, but the right engine continued to provide power. The left engine caught again and continued to run. At 1325 on October 1st, the Neptune's wheels once more touched the earth... touched it hard... with tires that had been overinflated in Perth, 11,236 miles and 55 hours and 17 minutes from where they had taken off.



The Truculent Turtle's logo was inspired by Disney.

Before the day was over, the Turtle's crew met with Secretary Forrestal and were awarded Distinguished Flying Crosses by President Harry S. Truman in the White House. And Joey, relieved to be back on solid earth, had been installed in luxurious quarters in the Washington Zoo. The record established by CDR Tom Davies and the crew of the Truculent Turtle stood not just for a year or two or three, but for decades. The distance record for all aircraft was broken in 1962 by a jet-powered B-52. The Truculent Turtle's record for piston-engine/propeller driven aircraft was broken by Burt Rutan's Voyager, a lightweight carbon-fiber aircraft, which made its historic around the world non-stop flight in 1986, more than 40 years after the Turtle landed in Columbus.

There is little doubt that the flight of the Truculent Turtle convinced those in Congress that the Navy not only had a very capable long-range patrol aircraft, but that the Navy should retain the role of maritime surveillance and patrol rather than turning it over to the Air Force.

No one today seems to know when the Turtle became known as the Truculent Turtle. After a well-earned publicity tour, the Truculent Turtle was used by the Naval Air Test Center, Patuxent River, Maryland as a flying test bed for advanced avionics systems before it was retired with honors in 1953 and put on display in Norfolk, Virginia, where it was repositioned in 1968 to the high visibility post at the main gate of NAS Norfolk. In 1977, the Truculent Turtle was transported to the National Naval Aviation Museum in Pensacola, Florida where it now holds forth in a place of honor in the museum's Hangar Bay One display area. The nose art on this famous P2V-1 still says "The Turtle" with its Disney-created pipe-smoking naval-aviator-turtle peddling a whirling propeller.

Tom Davies went on to an illustrious career that led to flag rank selection in 1965. CAPT Eugene Rankin completed his naval career as CO of the carrier USS *Kearsarge*. Nothing has been found in literature or on the internet about the further careers of CDR Walter Reid or LCDR Roy Tabeling.

The VP-2 Association is now in a fund-raising mode to collect donations to help pay for the restoration and upkeep of the Truculent Turtle. Please direct all contributions to the VP-2 Association, P.O. Box 2894, Gardnerville, NV 89410, and direct inquiries to Bob Champoux at rchmpoux@comcast.net.■

Tale Wind

Outshining the Blues

By CAPT John R. Iler, USN (Ret.)

In May 1949, with about 25 hours in the FH-1 Phantom jet, I made a cross country flight to NAS Pensacola to see my old boss, CAPT Bill Sinton, whose aide I'd been from 1946-1947. We played golf that morning and were shooting the breeze when he said, "This is Navy Day! How about giving us a jet demonstration following the Blue Angels show? I'll even gas your jet!" (The Blues were flying prop-driven Bearcats at the time.)

I agreed and Bill sent me to Corry Field where Dusty Rhodes, one of the wingman, was about to take off as part of the Blue Angels show. Dusty, who became the leader in 1948, briefed me on the maneuvers they planned for the show. It sounded a lot like "flat-hatting" to me, which I have never done in my life...not once.

After the Angels were up, I took off and at a safe altitude practiced the maneuvers Dusty and I had discussed. After the Blues' performance I roared in and tried to emulate much of what the Blues had done. (I scooped one slow roll, which reminded me I was close to the ground.)

Sandy Sanderson, an old buddy of mine, was telling the crowd over the public address system that they were observing an old P-Boat aviator who had "gone astray in fighters."

Finally, Sandy radioed that the crowd wanted some fast passes over Chevalier Field. The Phantom could really roll downhill, so I gave them a number of 400 knot-plus passes at low level. I learned later the local paper reported that I "stole the show" from the Blues, but if so, I have to blame Dusty for his kind, thorough and detailed briefing.

WINGS OF GOLD

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