

This article was written for the Patrol Squadron Two website at www.patron2.com. A condensed version of this article appeared in the Association of Naval Aviation's "Wings of Gold" magazine's Spring 2011 issue.

The VP-2 Association is raising the needed funds to preserve and maintain the Truculent Turtle in perpetuity as it takes its rightful place of honor in the Navy's most prestigious air museum. Send your donations made out to the VP-2 Association to Doug Donohue at P.O. Box 2894, Gardnerville, NV 89410. For donations by credit card, please go to the NNAM website at www.navalaviationmuseum.org/getinvolved/giving/contribution-form and fill in the information requested. In the drop down "Designation" box click on "Exhibits", and then in the "Comments" box insert "VP-2 Truculent Turtle". After submission, the museum will provide a receipt; please forward a copy to Doug Donohue at nvsoar@charter.net to assure donation tracking and appropriate acknowledgment.

The Historic Flight of the Truculent Turtle By Captain Victor S. Gulliver, U.S. Navy (Ret.)

The Beginning...

At the close of World War II, 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 PV-2 Harpoon were important mainstays of the war. Their forward firing cannons and their relatively short endurance made them more suitable in attack and escort roles than for long-range patrols. These aircraft did prove valuable in an ASW role in the North Atlantic toward the end of the war, and had success in ASW operations in the Western Atlantic close to shore. The Navy also had longer range aircraft in its inventory, but each had its own shortcomings. The PBY and PBM seaplanes did valiant service during the war. Both had longer range than the PV-1 and PV-2, but were also slower and more vulnerable to enemy attack.

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. The PBJ Mitchell bomber, a variant of the B-25, which Doolittle's Raiders flew from the U.S.S. Hornet to attack the Japanese mainland, saw some success with the Marine Corps, but saw little use as a Navy patrol plane. The PB-1 Flying Fortress, a variant of the famous AAF B-17, also saw little use in patrol operations. The PB4Y Liberator, a variant of the AAF B-24, saw wider 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.

During World War II, the Army Air Forces 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. From bases in the U.K., the AAF flew literally thousands of bombing missions per day against strategic Axis targets in Europe. No one can ever forget the wartime losses of thousands of our AAF aircraft and brave crews over the span of WWII. 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 was used to bomb Hiroshima and Nagasaki.

Soon after the close of WWII, there was a move underway to make the Army Air Forces a separate military service. Up to that point, we had a War Department that included the Army and the Army Air Forces, and we had a Navy Department that included the Navy and Marine Corps. The AAF was a subsidiary of the Army, while the Marine Corps was considered a separate branch of the military under the Secretary of the Navy. The AAF wanted its independence from the Army and wanted separate-service status similar to the Marine Corps, but with its own Department and Secretary like the Army and Navy. There was also an effort by the Army Air Forces to enlarge its scope of responsibility by attempting to take over the Navy's and Marine's air arm. Those attitudes stemmed from two decades before when General Billy Mitchell proposed that all military aviation matters should be the responsibility of a single, independent air force. The AAF had so proved its worth in WWII that it gained a good deal of 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 and Marine Corps to use aircraft carriers, but they wanted the carrier airplanes to be Air Force airplanes. Some even accused the AAF of wanting control over the Army's Howitzers that shot cannon shells into the air.

In 1946, there was a tremendous down-sizing 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 Army Air Forces 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. They also had a huge behemoth of an airplane coming into production... the ten-engine B-36, that later proved to be highly unreliable and that was quickly outmoded. The Navy was waiting for its new patrol aircraft to come off the production lines... the P2V Neptune.

Even before the end of the hostilities of WWII, CDR Thomas D. Davies, experienced in patrol aviation and decorated for achievement in ASW, was assigned for duty in the Navy's Bureau of Aeronautics. In early 1946, CDR Eugene P. Rankin, another patrol squadron veteran, arrived for duty in BuAer in Washington, D.C. CDR Davies headed the Patrol Plane Class Desk, supervising the design and selection of the Navy's next patrol aircraft. CDR Rankin was assigned to the Armaments Division, where he had access and input to the newly designed P2V's weapons systems. Both officers, and many other Navy officials in the Capitol, were intensely aware that the Navy's role in maritime surveillance and reconnaissance was considered up for grabs in many Washington, D.C. circles.

While the P2V was still in the final design stage, CDR Davies was working with Lockheed to extend the P2V's long-range capabilities. At Davies' request, Lockheed initiated "Operation Turtle" to investigate ways to extend the range of the P2V. CDR Davies spoke openly about his desire to use the P2V in an endurance record-breaking attempt to show that it was just as capable of covering the world's oceans as the B-29. CDR Eugene Rankin was the first to volunteer to participate in such a flight. The conclusions of the "Operation Turtle" study suggested that a highly modified P2V Neptune could fly at least 12,000 statute miles.

In June of 1946, P2V-1 aircraft began coming off the Lockheed Aircraft Corporation's production line in Burbank, California. Since the cost of the P2V's represented a sizeable portion of the Navy's peacetime 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 sent 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 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 Admiral 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 7500 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. Not coincidentally, the distance from Perth, Australia to Bermuda, via great circle route, is almost exactly 12,000 miles.

There is no hard evidence to prove it today, but it is widely believed that CDR Davies drafted the memo that Admiral Nimitz sent to SECDEF Forrestal, and gained the support of VADM Arthur Radford, the Deputy Chief of Naval Operations for Air Warfare to push the project along.

Preparations...

One of the first concerns of those planning the record-breaking attempt, even before it was proposed to the Secretary of the Navy, was to select a take-off point and a landing point. Selecting two suitable airfields 12,000 miles apart was not an easy task, especially considering that landing in the United States, and maybe even in Washington, D.C., would have the most political and public affairs impact. Logistics could be a problem. The point selected for take-off would have to be "friendly territory" and accessible to the media and to all the support personnel who would be necessary for the record attempt.

Early in the history of naval aviation, there were numerous attempts to set distance records. In 1919, the Navy sent three NC bi-planes out in an attempt to become the first to fly across the Atlantic. The Navy had stationed ships at 50 mile intervals all across the ocean to aid the fragile planes in their navigation and to be close at hand should emergencies develop. The same precautions were taken again with early attempts to fly from Hawaii to the U. S. mainland. But in 1946, a trip halfway around the world was a different story in a different political atmosphere. First of all, the Navy didn't have enough ships to station them all along the intended route of flight. More importantly, what sort of signal would such precautions send to the politicians and pundits about the abilities of and the confidence in the Navy's new patrol aircraft?

Working with a National Geographic global map, Tom Davies determined that Perth, Australia and Bermuda were almost diametrically opposite each other on the globe. A West to East flight from Perth would allow the first 1,800 miles to be over the Australian land mass, which would be important if an early emergency developed. The longest stretch of about 2,800 miles with no land masses (or runways) would be between the Hawaiian Islands and the west coast of the U.S. Toward the end of the flight, they would be over the U.S. and able to determine whether they could safely make it to Washington, D.C., and whether they could stretch the flight even further to Bermuda.

CDR Tom Davies, with his extensive knowledge of the P2V was the likely choice to be the pilot in command. CDR Eugene P. Rankin was chosen as co-pilot. CDR Walter S. Reid was selected as Engineering Officer and relief-pilot. LCDR Roy H. Tabeling was picked as Communications/Electronics Officer and relief-pilot. There were to be no other crew members. All four pilots were experienced in VP operations. All but CDR Davies had flown extensively over the entire intended route of flight.

The weather along the route of flight was critical. Wind patterns, cloud cover, storm centers all played a part in choosing both the route of flight and the timing of the flight. The Navy assigned a full-time aerologist to the project and stationed him on the USS Rehoboth, which deployed to Freemantle (the port for Perth) in early September. From the time they would leave the Australian continent until they arrived over the U.S., the availability of weather broadcast updates would be extremely limited. Townsville, on the northeast coast of Australia, and Kwajalein in the Marshall Islands would be the only possible weather update opportunities, and Kwajalein came with no guarantees owing to the intentional lack of long-range radio communication equipment on the aircraft. Even as they passed the Hawaiian Islands, they would likely be out of radio range. So, a great deal of effort was expended in providing reliable weather forecasts.

Not many are aware that, in June of 1946, Tom Davies and Eugene Rankin set a national speed record with the P2V even before the flight of the Turtle. In an effort to promote publicity for the new P2V, they flew the first XP2V from Floyd Bennett Field in New York City to Burbank in nine and one-half hours setting a new East coast to West coast time record that stood for many years. It also provided the opportunity to test the P2V's new Wright R-3350 engines which operated almost continually at a high rate of power during the flight. Those would not be the engines used by the Turtle, however.

Despite its many performance attributes, the P2V-1 aircraft coming off the production line in Burbank were not capable of the flight proposed by Admiral Nimitz. Much work needed to be done to a P2V to enhance its long-range endurance before the record-setting flight could be attempted. The first two P2V-1's from the production line were designated as XP2V's and were used for test and evaluation. The third P2V was diverted from its planned assignment with VP-ML-2, a forerunner of VP-2. Bureau Number 89082 was pulled off the production line and converted to become the Turtle. Aircraft weight was a driving factor in the record attempt, and anything that wasn't needed for the flight was removed to make room and weight for added fuel. Off came the turrets and the guns. The main oxygen system, cabin heaters and much of the radio equipment was removed. A few small oxygen bottles were installed for short-term emergency use. Wing and propeller anti-icing and deicing equipment was removed.

Additional gas tanks were installed in the nose (800 gallons), in the rear fuselage (2,190 gallons) and in the bomb-bay (2,123 gallons). Wing tip tanks that were originally designed for the Lockheed P-38 fighter were added. Those tip tanks were designed to hold 330 gallons each, but were restricted to 200 gallons each for the Turtle due to structural limitations. Additional fuel storage cells were installed in cavities in the wings to add another 1,552 gallons of gas. In total, the plane could hold 8,525 gallons of fuel... more than 5,000 gallons more than a standard P2V. For the long-range flight, an additional oil tank was installed in the nose 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 Turtle's Wright R-3350-8 engines that were being installed on the P2V's in the production line were removed and replaced with R-3350-14 engines to allow higher horsepower at maximum cruise RPM settings.

The plane was immediately known as "The Turtle," named, of course, after the Lockheed project to study extending the P2V-1's range... Operation Turtle. Even before its famous flight, the crew began calling it the "Truculent Turtle"... truculent, meaning defiant, aggressive, self-assertive, pugnacious... a determined fighter. Long before Johnny Carson made fun of beautiful downtown Burbank, Lockheed and Walt Disney Studios had a special relationship as Burbank neighbors during the war. A Disney cartoonist designed the now-famous nose art for the plane of a determined turtle astride a bicycle sprocket turning a propeller. The turtle is smoking a pipe and has a rabbit's foot dangling on his key chain. His face shows complete contentment. The logo was intended to be a humorous depiction of the Aesop Fable in which the tortoise (Navy) and the hare (Army Air Forces) have a race. The tortoise wins and exhibits the rabbit's foot as proof of his victory. There is no evidence to this day to suggest that the new U.S. Air Force found the logo humorous.

The engineers were concerned about the weight and the single-engine flight abilities of the aircraft at take-off. They built-in 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 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 5200 gallons in six minutes.

That feature was never needed, but it was extensively tested in the month before the Turtle departed the U.S. for Australia. Flying out of NAS Miramar, the Turtle practiced dumping loads of fresh water into the ocean.

Tom Davies and Eugene Rankin made numerous test flights in the Turtle at various take-off weights and operating weights so that performance figures and charts could be generated to predict how their plane might react during the record run. They did not test the Turtle at its planned maximum take-off weight. In fact, their heaviest take-off during their testing phase was more than 20,000 pounds lighter than at the Perth departure. In all, it took eight weeks for the Lockheed crew to configure the Turtle for the record attempt. Another four weeks was spent in the flight testing of the aircraft.

By late summer of 1946, all preparations had been completed, and Navy crews and Lockheed technicians headed across the Pacific to Australia, set to take advantage of summer's prevailing tailwinds. Tom Davies and Eugene Rankin, along with four Lockheed employees flew the Turtle across the Pacific to Perth with stops in Barbers Point, HI, Majuro in the Marshall Islands, and Townsville, Australia. Walt Reid, Roy Tabeling and all of the support personnel made the trip in a Navy R5D Skymaster, which also carried all the spare parts.

The original plan was to begin the record flight from Guildford, the civilian airport in Perth that was on the outskirts east of town. Tom Davies and Eugene Rankin flew several test flights out of Guildford, including a JATO takeoff for the benefit of the local photographers. After those test flights, it became apparent to the two pilots that the use of Guildford for their heavy takeoff might pose a danger for the citizens of Perth. They would be departing on a westerly runway and, if an engine coughed just after takeoff, the Turtle could drop into the middle of downtown Perth. After some discussion with the Royal Australian Air Force, the Turtle was moved to Pearce Aerodrome about 20 miles north of Perth. It, too, had a 6,000 foot runway and was closer to the coast.

For planning purposes, the take-off time from Perth was set for early evening. An evening departure would provide cooler air, which would allow more power for take-off. That timing would also put them at the east coast of the U.S. at around noon on the third day of the flight... a good time for the best news coverage. On September 27th, their dedicated aerologist predicted that the weather would be satisfactory on the 28th, but better on the 29th with a slight tailwind component at the start. The 29th was chosen, and the ball was put in motion for a 6:00PM departure.

On the day of their departure, Mr. C.W. Hobson, the managing secretary of the South Perth Zoo presented the Turtle crew with a nine-month old female kangaroo, named Joey. He intended that she be a passenger aboard the Turtle and be given to the Washington, D.C. Zoo. The crew thanked Mr. Hobson profusely for his generous gift, but tried to talk him into substituting a koala bear (or something else lighter than the kangaroo). They couldn't get out of adding Joey to the manifest since the local newspapers had already run the photo and the story of Mr. Hobson's presentation. The crew graciously accepted Joey and left eight gallons of precious fuel in Perth.

When all was ready on September 29th, the Turtle weighed in at 85,575 pounds. No twin-engine aircraft had ever lifted that much weight before. No twin-engine propeller aircraft has lifted that much weight since!

The Flight...

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 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 27 at 7:00 a.m. on September 29th. Lined up for take-off, all fueling was completed by 4:00 p.m. 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 take-off with CDR Thomas D. Davies, the pilot in command, in the left seat and CDR Eugene P. (Gene) Rankin, the copilot, in the right seat. 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 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."

At 6:11p.m., CDR Tom Davies stood on 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 throng of news reporters and photographers. Scattered across the air base 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 readings. Davies then 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. With the second 1,000-foot sign astern, the Turtle was committed. Davies could no longer stop the aircraft in the runway remaining. It was then, quite literally, fly or burn. When the quivering airspeed needle touched 87 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 twelve seconds, they provided the thrust of a third engine. At about 4,500 feet down the runway, 115 knots was reached on the airspeed indicator, 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.

As soon as they were certain that they were airborne, but still only an estimated five feet above the ground, Davies called “gear up.” Rankin moved the wheel-shaped actuator on the pedestal between the pilots to the up position, and the wheels came up. Davies likely tapped the brakes to stop the wheels from spinning, and the wheel-well doors closed just as the JATO bottles burned out. Behind the pilots 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 for now to prevent the slightest spark.

The Turtle had an estimated 20 feet of altitude and 130 knots of airspeed when the JATO bottles burned out. The JATO bottles were not just to give the Turtle additional speed on take-off, but were intended to improve the rate of climb immediately after lift-off. The Turtle barely cleared the trees a quarter of a mile from the end of the runway. The field elevation of Pearce Aerodrome was about 500 feet, and the terrain to the west sloped gradually down to the Indian Ocean about six miles from the field. So, even without climbing, the Turtle was able to gain height above the ground in the critical minutes after take-off.

Fortunately, the emergency procedures for a failed engine had been well thought out, but were never needed. At their takeoff weight, they estimated that 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 estimated that 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 that 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, the Turtle was over the waters of the Indian Ocean. With agonizing slowness, the altimeter and airspeed readings crept upward. Walt Reid jettisoned the empty JATO bottles. The Turtle was thought to have a 125 knot stall speed with the flaps up at that weight. When they had established a positive rate of climb, Gene Rankin started bringing the flaps up in careful small increments. At 165 knots, with the flaps fully retracted, Tom Davies made his first power reduction back to the maximum continuous setting. The sun was setting and the lights of the city were blinking on as the Turtle circled back over Perth at 3,500 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. Tom Davies applied full power and took her 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.

Alice Springs at Australia's center slid under the long wings at midnight and 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 Shokaku and Zuikaku to win the first carrier battle in history and prevent the cutoff and isolation of Australia. Within a day, the Turtle would fly near the site of the Battle of Midway, which changed the course of World War II in the Pacific only a month after the Battle of the Coral Sea.

At noon on the second day, the Turtle skirted the 10,000 foot peaks of 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's crew headed out across the vast and empty Pacific Ocean and began to establish an "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. Every two hours, a fresh pilot would enter the cockpit to relieve whoever had been on watch the longest.

The two Wright 3350 engines ran smoothly; all the gauges and needles showed normal conditions, and every hour another 200 or so miles of the Pacific passed astern. The crew's only worry was Joey the kangaroo, who hunched unhappily in her crate and refused to eat or drink.

Dawn of the second morning found the Turtle over Maro Reef, halfway between Midway Island and Oahu in the long chain of Hawaiian Islands. The Turtle only had one low-frequency radio, because most of the modern radio equipment had been removed for weight reduction. Calls to Midway and Hawaii for weather updates were unsuccessful due to the distance. Celestial navigation was showing that the Turtle was drifting southward from their intended great circle route due to increased northerly winds that were adding a headwind factor to their track. Instead of correcting their course by turning more northward, thereby increasing their headwinds, CDR Davies stayed on heading and accepted the fact that they would reach the west coast of the U.S. somewhere in northern California rather than near Seattle as originally planned. With the wing tip tanks empty, they were jettisoned over the ocean as the Turtle eased up to 10,000 feet and later 12,000 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."

The mission in which Joey's dim marsupial brain may or may not have acquired confidence was no stunt, despite her presence. In the fall of 1946, the increasingly hostile Soviet Union was pushing construction of a submarine force nearly ten times larger than Adolph Hitler's at the start of WWII. Antisubmarine warfare was the Navy's responsibility, regardless of the views of the Army Air Forces. The Turtle was among the first of the P2V Neptune patrol planes designed to counter the sub threat. Tom Davies' orders derived straight from the offices of Secretary of the Navy, James V. Forrestal, and the Chief of Naval Operations, Fleet Admiral Chester W. Nimitz. A dramatic demonstration was needed to prove beyond question that the new P2V patrol plane, its production representing a sizeable chunk of the Navy's skimpy

peacetime budget, could do the job. With its efficient design that gave it four-engine capability on two engines, the mission would show the Neptune's ability to cover the transoceanic distances necessary to perform its ASW mission and sea-surveillance functions. And, at a time when roles and missions were being developed to deliver nuclear weapons, it would not hurt a bit to show that the Navy, too, had that capability.

So far, the flight had gone pretty much 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, great rolling knuckles of cloud punched out from the coastal mountains. The Turtle bounced and vibrated. Ice crusted on the wings. Static blanked out radio transmissions and reception. The crew strapped down hard, turned up the red instrument lights and took turns trying to tune the radio direction finder to a recognizable station. It was midnight before Roy Tabeling succeeded in making contact with the ground and requested an instrument clearance eastward from California. They were 150 miles off the coast when 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?"

The Turtle had departed Perth some thirty-nine hours earlier and had been out of radio contact with anyone for the past twenty hours. That contact with Williams Radio called off a world-wide alert for ships and stations between Midway and the west coast to attempt contact with the Turtle on all frequencies. With some difficulty due to reception, the Turtle received an instrument clearance to proceed on airways from Oakland to Sacramento and on to Salt Lake City at 13,000 feet. The weather report was discouraging. It indicated heavy turbulence, thunderstorms, rain and icing conditions. As Gene Rankin wrote in a magazine article after the flight, "Had the Turtle been on the ground at an airport at that point, the question might have arisen: 'Is this trip necessary.'"

The Turtle reached the west coast at 9:16 p.m. about thirty miles north of San Francisco. Their estimated time of arrival, further north up the coast, had been 9:00 p.m. They had taken off about forty hours earlier and had covered 9,000 statute miles thus far. They had broken the distance record by more than a thousand miles, and all of their remaining fuel was in their wing tanks which showed about eight-tenths full. Speculation among the pilots began as to how much further the Turtle could fly before fuel exhaustion.

The static and atmospheric closed in again as did the weird and wonderful phenomenon of St. Elmo's fire that added to the problems of the Turtle's crew. The two propellers whirled in rings of blue-white light. Violet tongues licked up between the laminations of the windshield. Eerie purple spokes protruded from the Neptune's nose. All those distracting effects would increase in brilliance with an accompanying rise in the volume of static on all radio frequencies then suddenly discharge with a blinding flash and a thump only to slowly rebuild. The Turtle's oxygen system had been removed for the flight, so the pilots were using portable walk-around oxygen bottles to avoid anoxia at the high altitude.

The St. Elmo's fire had been annoying but not dangerous. It can be a heart-thumping experience for those witnessing it for the first time. The tachometer for the starboard engine had been acting up, but there was no problem synchronizing the engines. The pilots kept the fuel crossfeed switches, which connected both main tanks to both engines, in the "off" position so that each engine was feeding from the tank in that wing. Somewhere over Nevada, the starboard engine began running rough and losing power. After scanning the gauges, the pilots surmised that the carburetor intake was icing up and choking itself. To correct that, the carburetor air preheating systems on both engines were increased to full to clear out any carburetor ice as quickly as possible. Very quickly, the warm air solved the problem and the starboard engine ran smoothly again.

With an engine running rough, CDR Davies had to be thinking about their mission. The Turtle had broken the existing record, but was that good enough? It was just a matter of time before the AAF would launch another B-29 to take the record up another notch. The Neptune was now light enough for single engine flight, but how much farther could it go on one engine? And was it worth risking this first expensive aircraft of what should one day be a family of hundreds for the sake of improving a distance record?

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

After passing Salt Lake City, the weather finally broke with the dawn of the Turtle's third day in the air. The Turtle was cleared to descend to 9,000 feet. 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 big aft-fuselage tank were empty. The fuel gauges for the wing tanks were moving inexorably toward zero. CDR Davies and his crew consulted, tapped the fuel gauges, 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. By noon they concluded 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 cleaned-up and shaven and in uniform. And the fuel gauges all read empty. With the landing checklist completed and wheels and flaps down, CDR Davies cranked the Turtle around with a left turn onto final approach. As the plane leveled out on final, the starboard engine popped, sputtered and quit, but the port engine continued to provide power. At 400 feet, both pilots realized the problem and reached for the fuel crossfeed valves on the floor between their seats. In the banked turn, the near empty starboard fuel tank had stopped feeding fuel into the starboard engine. Within seconds, the starboard engine began running smoothly again and continued to run. The Turtle had been in no danger, since they were light enough to operate on one engine, but it would have been embarrassing to have an engine quit at that point.

At 1:28 p.m. 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.

After a hastily called press conference in Columbus, the crew was flown to NAS Anacostia in Washington, D.C. by a Marine Corps Reserve R5D, where they were met by their wives and the Secretary of the Navy. The crew were grounded by a flight surgeon upon landing in Columbus, so the Turtle was flown to Anacostia by a flight crew flown in from NAS Patuxent River. Before the day was over, the Turtle's crew had been awarded Distinguished Flying Crosses by Secretary Forrestal, and were scheduled to meet with President Harry S. Truman the next day. And Joey, observably 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/propeller driven aircraft was broken by Burt Rutan's Voyager, a 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, Ohio.

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. Although assigned on paper to join VP-2 along with the other P2V-1's that were first to come off the Lockheed production line, it never did. The Truculent Turtle was retired with honors in 1953 and put on display in Norfolk, Virginia, where it was repositioned in 1968 at the main gate of Naval Air Station Norfolk, Virginia. 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.

--Many thanks to the Naval Institute Proceedings magazine, Naval Aviation News magazine, the Naval Aviation Museum Foundation magazine, CDR Eugene P. Rankin, CDR Walter S. Reid and CDR Edward P. Stafford, whose articles about the Truculent Turtle were the basis for this website article.

The Crew

CDR Thomas D. Davies: There is little in the public record about two of the four men who piloted the Turtle on its historic flight. We know that CDR Tom Davies was selected as the Turtle's pilot in command during his tour in the Navy's Bureau of Aeronautics, where he was instrumental in the choice of the P2V for the Navy's maritime patrol needs. As the Bureau's Patrol Plane Contracting Officer, he was directly involved in the design of the long range flight capabilities of the P2V. Many people believe that CDR Davies originated the idea of performing a long-range record breaking attempt with the P2V to show that the Navy did have the ability to patrol all of the world's oceans. In all likelihood, he drafted the memo from the CNO to the SECDEF suggesting the Turtle's flight.

As did so many in the military during WWII, CDR Davies rose rapidly through the ranks, having been commissioned from the U.S. Naval Academy in 1937. He served on two cruisers after graduation. He completed flight training late in 1942, and was immediately assigned as Executive Officer of VPB-129, operating against German U-boats off the coast of Brazil. LCDR Davies was awarded the Distinguished Flying Cross after his crew's direct hit and sinking of a German sub only five years after his Naval Academy graduation. He then commanded a patrol squadron of Brazilian fliers, and wrote an instruction book in Portuguese for the training of his pilots.

After his record-breaking Turtle flight, CDR Davies was one of two pilots who demonstrated the P2V's ability to take off from an aircraft carrier (the USS Coral Sea) using JATO power augmentation. That demonstration was vital to Navy interests because the Navy's first planned carrier-based nuclear weapon delivery vehicle was still a year away from production. The carrier launch of P2V's kept the Navy in the nuclear weapon delivery business, a warfare role that the Air Force wanted for its own.

CAPT Davies served as Commander Fleet Air Wing Three in Brunswick, ME during the Cuban missile crisis. He was the Commanding Officer of NAS Norfolk prior to his selection for flag rank in 1965. As a flag officer, he worked in the Office of the Secretary of Defense, where he created the Office of Program Appraisal (OPA), which oversees all aspects of the Navy's budgets.

Not many people realize that Tom Davies was a creative and prolific engineer and inventor. A stereoscopic range-finding gun sight that he invented while he was a midshipman at the Naval Academy was adopted and installed on all Navy ships with large caliber guns during WWII. He also designed the first ski-equipped landing gear for use in Antarctic operations. He created novel improvements to navigation sextants to facilitate their use on ships in rough seas. Separately, he created improvements to airborne sextants for use in polar navigation. He also published navigational tables that are still in use today.

RADM Davies retired from the Navy in 1973 to serve in a Presidential appointment as Assistant Director, Arms Control and Disarmament Agency. He passed away in 1991 at the age of 77.

CDR Eugene P. Rankin: CDR Eugene Rankin, a U.S. Naval Academy graduate and classmate of Tom Davies, earned his wings in 1941 and was with a VP squadron in Panama at the outbreak of WWII. In 1943, just two years after earning his wings, he was assigned as Commanding Officer of VP-81, one of the Black Cat Squadrons in the Pacific operating PBY Catalina seaplanes. In 1946, CDR Rankin was assigned to the Armaments Division in BuAer where he was aware of the development of the P2V and discussed with Tom Davies the possibilities of a long-range record setting flight. He was the first to volunteer to be a part of the Turtle crew.

After the Turtle flight, CDR Rankin switched from land-based to carrier-based aviation. He was the CO of VF-1 aboard the USS Midway (CV-41), flying the F4U Corsair. Following a tour at the Naval Academy, he was CO of VC-8, flying the AJ Savage. He served as XO aboard USS Rendova (CVE-112), followed by tours on OPNAV, CINCLANT and CINCPAC staffs. He became the CO of USS Pine Island (AV-12) in 1961, and became the CO of USS Kearsarge (CVS-33) in 1962. During his time on the Kearsarge, that ship participated in NASA's first-man-in-space program, Project Mercury. In October of 1962, the Kearsarge recovered Wally Schirra and his Sigma 7, and six months later recovered Gordon Cooper and his Faith 7.

Prior to retirement from the Navy in 1967 he served as Chief of Staff, COMFAIR-SANDIEGO and Inspector General ELEVENTH Naval District. As a civilian, he was an executive with Bisset-Berman, a manufacturer of oceanographic instruments, and later a Trust Officer with San Diego Trust & Savings Bank. He was a long-time Commodore of the Coronado Yacht Club before he passed away in 2000.

CDR Walter S. Reid: CDR Reid was also a Naval Academy classmate of Tom Davies and Eugene Rankin. After going through flight training, he served in patrol squadrons in Panama and Bermuda. He commanded aircraft maintenance squadrons in Australia and in Norfolk, VA. His flying experience in Panama, the Caribbean, the South Pacific and Perth helped him in his selection as Engineering Officer on the Turtle crew. After the Turtle flight, CDR Reid was assigned to the Naval Proving Ground, Dahlgren, VA. He retired from the Navy as a Captain and was known to have been a consultant with the U.S. Coast Guard. CDR Reid wrote an excellent account of the Turtle's flight for Popular Mechanics magazine.

LCDR Roy H. Tabelaing: Nothing about LCDR Tabelaing can be found in literature or on the Internet. An article in Foundation magazine by Eugene Rankin indicated that Roy Tabelaing had first served in a patrol squadron in Panama and then had been a junior officer in VP-81 until 1944 while CDR Rankin was the CO. LCDR Tabelaing was awarded the Air Medal for night PBY operations in the Pacific, and a Commendation Medal for rescuing an Army pilot shot down near Bougainville. Unable to land at sea because of a storm, LCDR Tabelaing put his PBY down in a Japanese harbor and taxied out to pick up the flier who was clinging to a life raft.

LCDR Tabelaing was chosen for the Turtle crew on the basis of his electronics and communications expertise. After the Turtle flight, he was assigned to the Naval Research Laboratory in Washington, D.C. Roy Tabelaing retired from the Navy as a Commander and was an engineer with RCA at the Space Center in Florida.