



FLYING THE CLIPPERS

They used rain showers for windshield washers and oceans for runways.

I well remember crossing the Atlantic Ocean from the Azores Islands to Bermuda in the Pan Am Clippers with 200 to 500 feet of altitude as a rule. Since we flew at night, and since there were no altimeter readings enroute, we kept the landing lights on to make sure we did not fly into the water. Arriving at Bermuda during the early hours of the morning, we often looked for small rain clouds to fly through to wash the salt spray from the windshield. During those early days, we had no windshield washers.

There were no long-range navigational aids available, either, when the large flying boats first started crossing the oceans. Indeed, there were none until after World War II. Celestial navigation was the only way to fix the position over water, except for a short distance from shore where nondirectional beacons could be used for directional bearing. Because celestial navigation required seeing the planets and stars, we flew at night.

The reason we flew so low at night was that westbound flights

from Europe to the United States almost always encountered headwinds. The rule was the lower the altitude, the less the headwinds, and vice versa.

I joined Pan Am after receiving a degree in aeronautical engineering from Purdue University and serving in the Army Air Corps for two years. Based at Brownsville, Texas, I flew Ford Tri-motors, DC-2s and DC-3s to Mexico, Central and South America. A year later, I was transferred to New York to qualify in overocean celestial navigation and advanced to first officer on the four-engine Clipper flying boats. Then came December 7, 1941, and the United States found itself at war.

This was the first and only time that we had engaged enemies across both the Atlantic and Pacific Oceans. This was to put both our Navy and Air Corps (later to become the Air Force) to the most severe test that they had ever known. Pan American was the only commercial airline flying outside the states and the only airline that had airplanes (flying boats) capable of spanning

the oceans. Pan Am also had the navigational, communications and meteorological expertise that other airlines did not. This led to a U.S. government takeover to a degree. Flight crew members were put in military uniform, depending for which service the operation was being performed—Navy or Army. I had both uniforms, as well as Pan Am's, and wore whichever suited the mission.

Early in the war years, I was navigating a Boeing 314 Clipper on a special mission from Bathurst, British West Africa, to Belem, Brazil. The route started a short distance south of the equator and ended at the mouth of the Amazon River on the equator. There was no weather forecast and we had no charts. This meant going to the ship's library, getting the navigation text books out and constructing an ocean longitude and latitude chart for this route. Because the route kept us near the equator and in the doldrum area (calm sea and winds), it was decided to predicate the flight plan on a zero wind component. The Boeing was

When World War II came, Pan Am had the necessary transports—the Boeing 314 Clippers. Chuck Bassett flew the Clippers for Pan Am on passenger flights, and on military operations. The flight crews wore the uniform that suited the day's mission.



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fueled to full tanks (5,400 gallons). We took off just before sunset.

All night, the celestial bodies showed our Clipper was right on flight plan. The sun rose; this meant relying on dead-reckoning, using sun and moon sights as well. As the sun was about to set, we sighted the coast of Brazil and a short time later the telltale water from the Amazon River. A few minutes later, the Boeing Clipper was tying up at the dock after being airborne for 24 hours and 24 minutes. We still had nearly two hours of fuel remaining. The special mission was to bring the King of Greece and his staff to Washington, D.C.

On another occasion, returning from England and Ireland to New York, we stopped for refueling in Newfoundland on Botwood Lake. These arrivals were usually just after daybreak and about the time the lobstermen were returning from hauling their pots. There was always a 50-gallon drum filled with water, and a fire burning under it, on the dock. As the lobstermen unloaded their catch, they would always throw a few lobsters into the boiling



Bassett started his aviation career in 1938 in the U.S. Army Air Corps, flying PT-13 Stearmans. He retired as a Pan Am Boeing 747 captain. In between were those great adventures in the Flying Clippers.

water. The price for a lobster breakfast was 25 cents each, any size. We could eat them there or take them (dead or alive) to New York in another six to eight hours.

The need for more long-range flying boats was realized and the Navy contracted with Consolidated Aircraft to produce a water version of the B-24, called the PB2Y-3 flying boat. This turned out to be quite a work-horse during the early years of the War. The 2Y3 (as it became known) had the same wing and flaps as the B-24 but had a boat hull. It was powered with the same reliable Pratt & Whitney Twin Wasp, R-1830-S4C4-G 1,200-hp engines as the B-24 and many other airplanes. The Ford Motor Car Company at the Willow Run plant turned these engines out like Ford Jeeps—by the thousands. They were good and reliable powerplants; however, I did have one let me down once.

I had been on a so-called circle trip (New York, England, North Africa, Dakar, Brazil, Trinidad, Bermuda, New York). I departed Natal, Brazil, for Trinidad in the late evening. At about midnight, near



Georgetown, British Guinea (an alternate water-landing area), the number-one engine (old reliable P&W 1830) came apart. It took most of the engine cowling with it; however, everything cleared the tail surfaces. I immediately asked the radio officer to contact Georgetown for landing information. During these days, all communication was by CW, or Morse code, with few stations having voice facilities. Georgetown was not on the air; it seems that they were not notified that this flight was taking place. We told Trinidad of our plight, and they relayed their weather conditions, which were, as usual, good. Since it was midnight and there was no moon, the jungle looked very black. I decided to continue on to Trinidad.

It was soon discovered that because the number-one cowling was missing, the drag was such that all the rated power was needed to keep aloft. We had drifted down from 8,000 feet to 1,000 feet and still were unable to reduce power to conserve fuel. By now, we were over the water and, we could check our altitude visually. I calculated that we

had enough fuel to proceed to Trinidad at a higher power on three engines; however, my flight engineer then informed me that we could not crossfeed from the number-one tank (the one that supplied the failed engine) fast enough to supply the other three good engines.

The only solution was to reduce our weight. The only weight we had was 16 Navy personnel and a critical load of brillium that we loaded at Belem, destined for the United States for use as a critical hardening agent for radio parts. We had no choice but to open the wheel hatch door and throw 2,200 pounds of this critical cargo to the sharks. This lowered our gross weight to a point where we could reduce our engine power enough to make Trinidad.

At this point, we estimated that we were about 200 feet above the water. We had had no altimeter reading since Belem, and the one

given us for Trinidad. The normal route approaching Trinidad was around the island, as there was an 800-foot hill near the center of the island. I elected to proceed on the direct route because of the limited fuel remaining; however, this meant gaining enough altitude to clear the hill. We established a gradual climb about an hour before reaching Trinidad and reached 1,200 feet before arriving over the 800-foot hill. We landed straight-in with the aid of a light line (kerosene flare pots on rafts, tied to anchors about 100 feet apart in a line into the landing wind conditions). While taxiing in to the dock area, the number-four engine stopped because of fuel starvation.

Many flying boat pilots look back to those days and are glad that they are behind them. However, a few of us would like to live them over again. Soon after jets went into commercial operation, I decided to get back into water operation and acquired a Republic K-C3 Seabee. Having retired six years ago from Boeing 747 flying, I enjoy getting into the Bee for real adventure.

—Charles E. Bassett

Republic Seabee N6138K is Chuck Bassett's own means of returning to the old days of water flying. He has owned the Seabee for 15 years, and flies it to Seaplane Pilots Association gatherings.

