FIRST FLIGHT ACROSS THE ENGLISH CHANNEL

BY ROBERT G. WALDVOGEL

Great Britain, always disconnected from the European continent because of its insularity, had only been reachable by sea until 1785, at which time the first balloon had successfully crossed the English Channel by air. By 1908, 35 other aerial balloon crossings had been completed, but none had been made with heavier-than-air craft. That had been about to change, and the feat would fully equal the many epic, record-breaking flights now firmly impressed in the annals of aviation history, such as the transcontinental flight made by Calbraith Rogers in 1911 with the Vin Fiz Flyer and the solo transatlantic crossing by Charles Lindbergh in 1927 with the Ryan Monoplane nicknamed *Spirit of St. Louis*.

Sparked by the *London Daily Mail's* 500 British pound challenge issued on October 5, 1908, an amount later doubled, the event had sought "the person who shall succeed in flying across the English Channel from a point on English soil to a point on French soil, or vice-versa" in a heavier-than-air craft without stopping.

Although Wilbur and Orville Wright had been perceived as the only two capable of the feat, their involvement with aircraft sales-pursuing demonstrations had precluded their participation, despite a significantly increased prize offer, and Hubert Latham, who had spent two years in the French Army and had already successfully crossed the Channel in an aerial balloon, had been the first to accept the challenge. Having already earned a French duration record and a world record for monoplanes for the one-hour, seven-minute, 37-second flight in his Antoinette IV on June 5, 1909, he had intended to make the crossing with this aircraft, taking off from cliffs at Sangatte, a village six miles from Calais, where he had set up a rudimentary camp. French destroyers and crane-equipped tugboats would follow his course.

Count Charles de Lambert, a second contender and Wilbur Wright's first student pilot in France, intended to make the journey with Wright aircraft, but of his two machines, one had been damaged during a test flight and the other had not been readied in time for the event.

Latham had suffered a similar fate. Fighting strong winds during a July 13 crossing attempt, he had been forced to land in a corn patch, severing the right strut and wheel of his aircraft, while a second attempt, six days later, had resulted in an engine failure-caused water landing near the French destroyer following him. The airplane, now too damaged for anything but a lengthy rebuild, had to be substituted by the Antoinette VII, although at least a week had been needed to prepare it for flight.

It had been at this time that a third contender, Louis Bleriot, had entered the race with his own design, the Bleriot XI, a smaller, though not dissimilar aircraft to the Antoinette. Incorporating several features already introduced by his earlier aircraft and therefore representing the latest in a series of evolutions, it had sported a primarily open, box-frame fuselage; a small engine; fabric-covered, pylon-supported wings; wing-warping mechanisms; an open cockpit; the cloche method of actuating both the wing-warping and the elevators; and a tri-wheel undercarriage.

The rounded-tip wings, with an 8.53-meter span, a 1.83-meter chord, a 4.65 aspect ratio, and a 13.95-square-meter area, had been attached to the poplar fuselage, their trailing edges differentially warped to induce in-flight banking. The 25-hp, three-cylinder, V-shaped, air-cooled

Anzani engine, replacing the original seven-cylinder REP semi-radial, sported a 2.08-meter wooden propeller which produced 105 kilos of thrust at 1,450 revolutions-per-minute.

The horizontal tail, comprised of a fixed, center section with elevating tips, had been built round a steel tube bolted to the fuselage underside by cast aluminum fittings, while the rudder, positioned 13 inches behind it, extended above the fuselage.

The undercarriage had been comprised of two main, fixed wheels which swung on links to cater to cross-wind ground conditions and absorbed landing impacts by means of elastic springs, and a single, castering tail wheel.

First flying on January 23, 1909 at Issy, France, and covering a 200-meter distance, the Bleriot XI, with its characteristic forward bedstead frame built up of two ash horizontal beams, two vertical beams, and two vertical tubes to provide engine and landing gear mounts, took to the air for a second time the following month on February 18, with a two-square-meter larger wing.

Louis Bleriot himself had set up his camp on a farm at Les Barraques so that he could use its flat pasture as a runway.

On July 23, de Lambert became the third pilot to officially enter the race, but of the three, he had been impeded by his still-unprepared aircraft while the other two had been hindered by the weather.

Diminishing winds and clearing skies on July 25, however, indicated cross-Channel flight potential, and Bleriot, having already awakened early, warmed his engine by 0400, before making a 15-minute practice circuit and relanding.

As the sun triumphed over night 35 minutes later, Bleriot prepared himself to triumph over flight, climbing into the fabric-covered monoplane and throwing to the ground the crutches he had used to help him walk after a prior flight fuel tank explosion had burned his left foot. "If I cannot walk, I will show the world I can fly!" he had proclaimed.

The sun inched above Calais Castle.

After oil had been added to the aircraft's 25-hp engine and its 17-liter fuel tank had been topped off, Anzani, maker of the powerplant which bore his name, turned the wooden propeller and the five men holding the tail down released it when Bleriot had commanded, "Let's go!"

Throttling into 1,200 revolutions-per-minute of power, Bleriot accelerated his airplane over the grass toward the sand and the open Channel, gateway to England and aeronautical history, pulling back on the cloche and separating its two still-spinning, bicycle-like wheels from French soil, as if they continued to ride some invisible, aerial track.

Surmounting the telegraph wires, the aircraft climbed to 180 feet, inching out over the water body which had generated the challenge. Reducing power, it leveled off at 260 feet and maintained a 43-mph airspeed.

The French destroyer, *Escopette*, intended to provide flight following and carrying journalists and Bleriot's wife, moved into view. Seeing the propeller-pulled object in the sky amid the cylindrical sun's ascent above the horizon, she yelled, "*Mon Dieu*! There he is!" as her husband gracefully passed overhead on fabric wings which had created a 260-foot-high aerial bridge between landmasses, creating the lift for which they had been designed. But the speed, one-and-a-half times greater than that of the ship's lumbering 26, had rendered it a far superior opponent and it quickly overtook it.

Attempting to make a wide circle in order to remain in sight, Bleriot quickly realized that his aircraft had been demonstrating its intrinsic speed and distance advantage over the water-plying vessel. Its intended directional aid toward England, alas, could not be used.

Relaxing his grip on the cloche, Bleriot permitted the aircraft he himself had designed to find its own way across the water.

Completely disconnected from soil and soul after ten minutes aloft, with neither coast ahead nor coast behind visible, he felt "alone, unguided, without compass, in the air over the middle of the Channel."

The wind had begun to regain its strength. The 25-hp Anzani engine, apparently overheating from its continuous-power output, suddenly sputtered and the airplane nudged itself out of its artificial plateau toward the Channel's waves and whitecaps. Boring through a rainsquall, whose pelting douse of cool water ironically nourished the powerplant of its needs, the aircraft regained even, altitude-holdng power.

Wrestling with wind and fog, it fought its way to England. A long gray line, rising above the horizon and representing its destination, appeared ahead, but it did not resemble Dover. The southwest wind had diverted the frail bird to St. Margaret's Bay instead, yet the Dover Lighthouse, rising prominently in the west, had marked the location of the castle, and Bleriot banked left toward it, penetrating strong headwinds and paralleling the coast at a one-mile distance.

Following the presumably harbor-approaching channel boats, Bleriot spotted reporter Charles Fontaine waiving the promised French tricolor to mark the entrance over Shakespeare Cliff of North Foreland Meadow, itself next to Dover Castle.

Completing a half-circle above the Channel, Bleriot initiated his approach to England—and history. Threading its way between the gap and passing over land for the first time in more than half an hour, the aircraft banked to avoid red buildings on its right, but it had been clenched by the fist of low-level turbulence and winds, which had thrice spun it round, rendering it uncontrollable. "At once, I stop my motor," Bleriot had later stated, "and instantly my machine falls straight upon the land from a height of 65 feet. In two or three seconds, I am safe upon your shore," although the airplane's propeller and landing gear had sustained damage.

Latham, still asleep on the continent which Bleriot had just bridged, did not fly at all that day and had to accept defeat. Although he had made the attempt two days later, he had once again plunged into the Channel when his engine had failed and he had sustained injuries.

Because of the historical event, the Bleriot XI, which had been offered in training, sport, military, and racing versions with varying dimensions, wingspans, engines, horsepower ratings, and capacities, had attracted over 800 worldwide sales, having been the most massively produced prewar monoplane.

Although the relatively short, 23-mile distance between Les Barraques in France and North Foreland Meadow in England had been covered in 36¹/₂ minutes, the flight's effects had been disproportionally long. For England, geographically protected and isolated by its surrounding Channel, its insularity had ended. For France, it had bred the designer, aircraft, and pilot which had triumphed over that Channel. And for the world, it had meant that the airplane, increasingly able to connect countries and continents, had paved the way toward unlimited future civil and military application.

SOURCES

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