



On May 31, 1928, the Bellanca K Sesquiplane "Roma" (NX-4864, c/n 107) with Roger Q. Williams, Cesare Sabelli and Piero Bonelli flew out over the Atlantic from Roosevelt Field to drop a wreath in memory of those fliers lost attempting to cross the ocean. The "Roma" later attempted to fly to Rome but engine trouble forced it back to land.

Bellanca's History Making Aircraft

By FELIPE E. EZQUERRO

It was in some odd corner of an evening paper that the sad piece of news appeared about Giuseppe Bellanca's death in a New York hospital late in 1960.

The quite unobtrusive press release of this necrologic information brought back to my mind the old images of an epoch in which this famous Italo-American aircraft builder filled newspaper headlines with his name. Such headlines were followed by extensive reports on the great exploits which, along with the aerial conquest of the Atlantic, finally allowed aviation to be universally accepted as a normal means of transportation.

The fact is that Giuseppe Mario Bellanca has an undeniable historic significance. When trying to focus the transcendental importance of the late 1920s and early 1930s on an individual person, everyone puts forth the name of Charles A. Lindbergh. When trying to pinpoint an airplane entitled to represent or symbolize man's efforts to conquer the wide barrier of the ocean, perhaps no airplane has more right to such a distinction than the exceptional high wing monoplane created by the small Sicilian builder who died five years ago. It should at least be remembered how many times attempts to conquer the Atlantic drew upon him and his aircraft in order to be successful.

Born in 1885, Giuseppe Bellanca studied at the Royal Institute of Milan, Italy; moved to Brooklyn, New York in 1911 with his parents and brothers; and began the design of various airplanes in the late years of that decade. He evolved the Bellanca Lifting Strut (an airfoil shaped strut acting as an auxiliary lifting surface) and installed it on DeHaviland Mail Planes for the government, giving them even better performance in-

creases than he'd promised. In 1921 he found the successful design formula that materialized in the five seat, closed cockpit Bellanca CF. Powered by a 90 hp Anzani engine, the CF won many prizes in efficiency contests during the years from 1922 (when it won 13 prizes in national and international events) to 1925.

As it was Bellanca's firm conviction that the operational reliability as well as the simplicity and low weight of the air-cooled, radial engine would make it play a decisive part in the development of commercial aviation, he built a derivation of the CF powered by a 200 hp Wright Whirlwind J-4 engine. This was the Wright-Bellanca WB-1 of 1925. It was followed by the Wright-built WB-2, with a 225 hp J-5 engine, that won all efficiency contests at the 1926 National Air Races. Like its predecessors, it caused a true sensation, and Charles Lindbergh wanted to buy it for his proposed Flight to Paris. Toilsome proceedings culminated when he went to the Columbia Aircraft Corporation, final owner of the plane. The dealings broke down as a result of the ungrounded pretension of the millionaire president of Columbia, Charles Levine, who said, "We are prepared to sell the airplane, but we reserve the right to select the crew to fly it to victory." Lindbergh closed discussions and turned to the Ryan Company of San Diego, California, where the legendary "Spirit of St. Louis" was built and flown in exactly 60 days.

In the first days of May 1927, three airplanes stood ready in New York for the attempt to fly to Paris--the "Spirit of St. Louis" with its lone pilot, Lindbergh; the Wright-Bellanca WB-2, now named "Columbia", with Clarence Chamberlin, Bert Acosta and Lloyd W. Bertaud



The Wright-Bellanca WB-2 "Columbia" before its flight to Helfta, Germany on June 4-5, 1927. (F. Ezquerro)



On October 9-10, 1930, the "Columbia" spanned the Atlantic Ocean for the second time. (Photo - F. Ezquerro)

being variously named to form its two man crew; and the tri-engined Fokker "America" which was to be captained by Commander Richard E. Byrd, accompanied by George O. Noville, Bernt Balchen and (later) Bert Acosta.

Though he was the last of the three to begin preparations, Lindbergh was the first to get off and successfully reached Paris 33 hours and 30 minutes later. Two weeks after his takeoff, the "Columbia" took to the air with the expert Clarence Chamberlin at the stick, carrying the first trans-Atlantic passenger in the person of Mr. Levine who quite unexpectedly climbed aboard the airplane when it was about to roll away. The goal of the "Columbia" was not Paris but Berlin, Germany, and the establishment of a distance record longer than Lindbergh's. Forty-two and three quarters hours after its takeoff from New York, the white "Columbia", its fuel tanks completely empty, landed at Helfta (Eisleben), a small German village some 100 miles southwest of Berlin, having flown 3911 miles (about 300 miles more than Lindbergh) at an average speed of 93.5 mph.

The "America" was the least fortunate of the three. It crossed the Atlantic successfully, but bad weather conditions prevented it from reaching Paris in two attempts and it barely escaped disaster when touching down in the sea off the French coast at Ver-sur-Mer.

Since the "Columbia" was the progenitor of the other record breaking Bellanca aircraft (all built after Giuseppe Bellanca quit Columbia Aircraft and opened his own factory), it is in order to describe it dimensionally. The aircraft had a span of 46' 4", a length of 27' 9", a height of 8' 5 1/2" and an empty weight of 1896 pounds. Behind the cockpit was a spacious cabin for the normal transportation of 4-6 passengers, but for the record flight the space was filled with additional fuel tanks giving the aircraft a total fuel capacity of 451 gallons. Takeoff weight rose to about 5000 pounds.

The most characteristic design feature was the Bellanca Lifting Struts, but for beauty of design, it is quite true the Bellanca did not distinguish itself. On the other hand, it is beyond doubt that it never failed to meet adequately and with great efficiency, the difficult commitments to which it was repeatedly subjected.

Besides the three successes we have mentioned here, the crossing of the Atlantic in 1927 led to a number of tragedies which ended in the disappearance of airplanes and crews in the immensity of the sea. Thus, when the year 1927 reached its end, the exploit of crossing the Atlantic was still an enticing adventure in which it was possible to win a gradually reduced fame, or death without leaving any more revealing testimony than some distorted and scattered wreckage thrown up by the sea in the wake of a passing steamer.

So it was that during the Spring and Summer of the succeeding years the press announced the purpose of new aviators intending to cross the ocean. Nearly all such

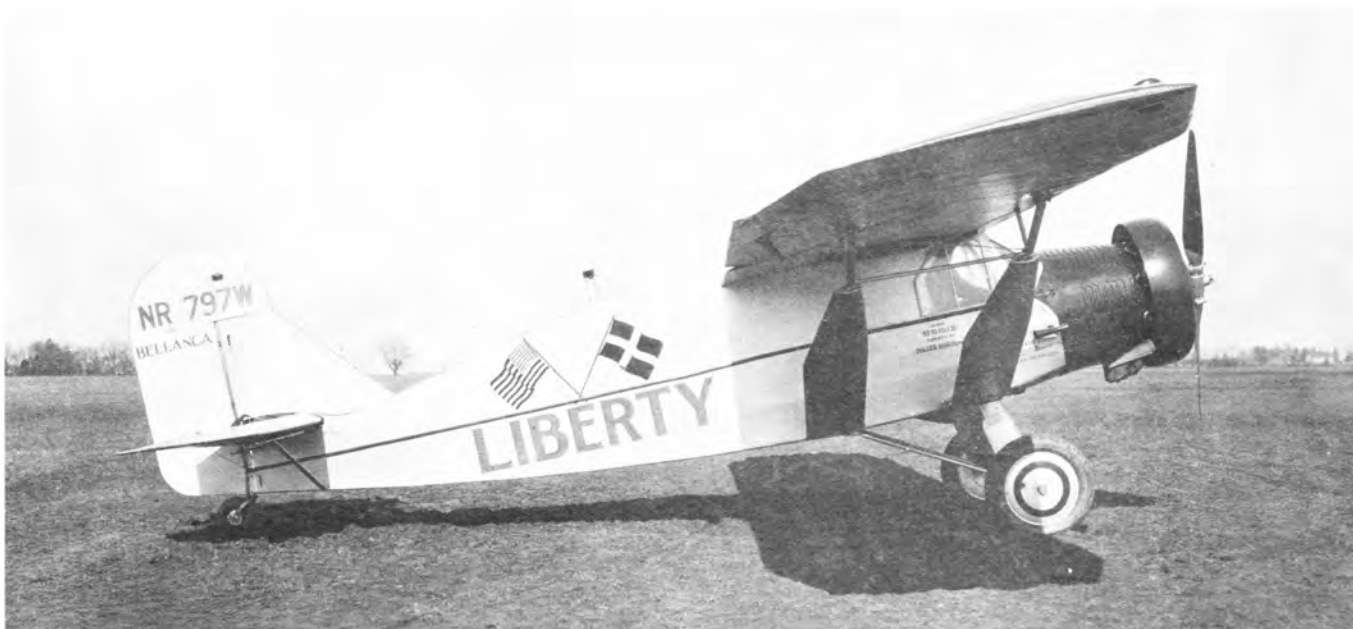
flights were planned from America to Europe and tried to introduce some novelty in order to attract the attention of the world. At one time they reported on the first bird-woman (Amelia Earhart in the Fokker "Friendship", 1928) to risk the reckless undertaking. Another time the novelty consisted of having a stowaway on board (the "Yellow Bird" of Assolant, Lefevre and Lotti, with Arthur Schreiber hidden in the rear fuselage, 1929). Then there was the lonely Urban Dietman who endeavored to reach London from Newfoundland in the monoplane "Golden Hind" which only weighed 772 pounds with no more than 110 available horsepower. And finally, a more extravagant example, there was the case of "The American Nurse" (the CH-400 Special formerly "Miss Veedol", 1932) which intended to parachute the nurse, Edna Newcomer, over Florence, Italy. As always there were two outcomes to such undertakings, the first two came to a happy ending, while the ending of the latter two flights was lost for all time in the enormity of the sea.

In the profuse notes kept on that epoch, we find the choice of an airplane type was repeatedly made in favor of Bellanca aircraft whose appearance remained little changed throughout the years, although some modifications were undertaken, such as landing gear fairings, a Townsend ring or NACA cowl around the engine, a deeper fuselage for long range flights and new tail designs.

Returning to our story of Atlantic crossings, we come to the Bellanca J "Pathfinder" (c/n 101, it was the first plane built in Bellanca's Delaware factory). On July 9, 1929 it dropped in on the airfield of Albericia near Santander, Spain. Its crew, Roger Q. Williams and Lewis Yancey, had been in direct competition with the



Bellanca J "Pathfinder", NX-3789, flew from Old Orchard, Maine to Santander, Spain in July 1929. (F. Ezquerro)



Bellanca J-300 Special "Liberty", c/n 3003, which flew from Newfoundland to Germany in 1931. (Photo - F. Ezquerro)



Cockpit interior of the "Liberty" [from 1]: Top row--Turn & Bank Indicator; Rate of Climb Indicator; Sperry Artificial Horizon; Altimeter; Oil Pressure Gauge; and Fuel Pressure Gauge. Bottom row--Air Speed Indicator; Earth Inductor Compass; Rieker Pitch Indicator; Tachometer; Throttle, Mixture and Spark Controls; Daiber Ball Compass; Oil Temperature Indicator; and Ignition Switch. (Photograph - Felipe E. Ezquerro)



The J-300 Special "Cape Cod", NR-761W, in 1931 with pilots Russell Boardman and John Polando. (F. Ezquerro)



Later in life c/n 3001, formerly "Cape Cod", had a deep belly and looked like this. (Photo - F. Ezquerro)

French Bernard monoplane, "Yellow Bird", for the first 1929 crossing of the Atlantic but had suffered a collapse of the landing gear on their takeoff (in the Bellanca J, c/n 106, NX-5316, "Green Flash" on 13 June). The "Yellow Bird" had made its crossing to Comillas, Spain (June 13-14), and Williams and Yancey acquired the "Pathfinder" with the intention of a more ambitious non-stop flight to Rome. After landing at Santander, 34 miles further than Comillas, they were quite satisfied with their accomplishment--3400 miles from Old Orchard, Maine in 31 hours and 30 minutes. From Santander they flew on to Rome the next day.

On October 9, 1930, Errol Boyd and Harry Connor again took the famous "Columbia" into the sky for its second attempt to master the Atlantic, and for the second time it triumphed. Flying from Harbor Grace, Newfoundland, it landed on a narrow beach at Tresco in the Scilly Islands after 23 hours, 40 minutes in the air. This historic airplane, for which a place of honor would have been reserved in the Smithsonian Institution, was destroyed in a fire which struck the sheds of the Bellanca Company at New Castle, Delaware in 1935.

The year 1931 was the peak year of the glory reaped by Bellanca airplanes. In the latter days of June of that year, the Bellanca J-300 "Liberty" of Otto Hillig and Holger Hoiriis took off from Newfoundland for a planned non-stop flight to Copenhagen, Denmark. It did

not make any difference that, disoriented by heavy fogs, the two airmen ended their journey in the German town of Krefeld, where no one awaited them, for on the next day more than 20,000 Danes welcomed their arrival in the capital city of Denmark. This was the 4th Atlantic crossing by a Bellanca airplane.

On the morning of July 28, 1931, with a difference of 17 minutes between them, two Bellanca aircraft took off from Floyd Bennett Field, in Brooklyn, New York, where the Bellanca family had found a home on their arrival from Italy twenty years before. The black and yellow J-300 Special "Cape Cod", powered by a 300 hp Wright engine and piloted by Russell Boardman and John Polando, was bound for the remote Istanbul, Turkey. Flying a curving course of 5014 miles, from the Hudson to the Bosphorus, with marvelously exact navigation, the aircraft set a new record for distance flying and remained airborne for 49 hours, 19 minutes. On touchdown, only 10 gallons of fuel remained of the 728 gallons which had been pumped into the plane's tanks.

Also taking off on that July 28th was the red CH-400 Special "Miss Veedol" with Clyde Pangborn and Hugh Bernadon. Their flight was intended to better the around the globe record of 8 days, 15 hours, 51 minutes which had been set the month before by Wiley Post and Harold Gatty in the Lockheed Vega "Winnie Mae". As the 425 hp Pratt



Bellanca CH-400 Special "Miss Veedol", c/n 3004, NR-796W, which made the first Pacific non-stop crossing by air, flying 4500 miles in 1931. Later the same plane became "The American Nurse" and was lost at sea, 1932. (Ezquerro)



Bellanca J-3-500, c/n 3007, license 13199, was named "Santa Lucia" for Francesco de Pinedo but crashed at takeoff.

& Whitney powered "Miss Veedo!" was much slower than the Lockheed, they planned to break the record by minimizing the number of intermediate landings and resulting loss of time by taking advantage of the longer flight range of their plane. The first leg was to be flown from New York to Moscow, but circumstances brought them down in Wales and dashed any hope they had of outpacing the "Winnie Mae". In spite of this, they did not abandon their undertaking and continued as far as Japan where they converted their failure into a sensational trans-Pacific achievement.

Flying from the beach of Samishiro, they made the first non-stop flight over the Pacific to Wenatchee, Washington--4,500 miles, the longest over-water flight until the Sevilla-Camaguey flight of the Spanish "Cuatro Vientos", in 41 hours, 13 minutes. When they took off from Japan, in order to cut down the excessive weight of their airplane, the crew of the "Miss Veedo!" dropped the landing gear, so that on American soil they came to each in a dramatic but successful way--sliding the plane in on its reinforced belly.

Four more Bellancas are found on the list of aircraft that mastered the Atlantic in this heroic period. The first of them was the CH-300 "Lituanica" (NR-688E, c/n 137) of Stephen Darius and Stanley Girenas who took off from New York for Kovno, Lithuania in July 1933. After logging slightly over 4000 miles in 36½ hours, they were forced to land 90 miles from Berlin with their fuel tanks completely dry. The next crossing, the eighth of the Atlantic by a Bellanca, took place on May 15, 1934. The Italians Cesare Sabelli and George Pond, who christened their J-300 "Leonardo da Vinci" (NR-13137, c/n 3006), planned to fly directly from New York to Rome. The operation did not work out as planned, and the two felt lucky to reach the coast of Ireland after a terrible struggle with a fuel lead failure which nearly forced them down into the sea. They'd recorded 3100 miles in 32 hours.

The toughness of the two valiant Polish brothers, Ben and Joe Adamowicz, who were determined to return by air to the Warsaw of their childhood, converted their dreams to reality in the early days of July 1934. The old Danish "Liberty", rebaptized "Olympia" and finally "Warszawa", added a new trans-Atlantic flight to its record, from Harbor Grace, Newfoundland to Flers-de-l'Orne, France, while bound for the Vistula capitol of Poland. Fourth Bellanca to cross the Atlantic in this period was that of Dr. Richard Light (CH-400 seaplane, NR-10794, c/n 621) which made the flight in stages from New York, to Newfoundland, to Iceland, to the Orkney

Islands, to Scotland in August and September 1934.

In this chain of successes, however, the failures were not missing. Among the most lamented was that of the great Italian pilot, Francesco de Pinedo. For his famous countryman, Giuseppe Bellanca prepared a special aircraft, the J-3-500, in which the Bellanca formula reached the zenith of its possibilities. The engine was a 525 hp Pratt & Whitney Wasp, wing span 53' 4", fuel capacity 1,027 gallons, maximum takeoff weight 9,920 pounds and the designed flight range was over 8,000 miles. "Santa Lucia", like the popular Neapolitan song, was the name given the airplane in which De Pinedo wanted to make a non-stop, solo flight from New York to Bagdad. For his unavoidable struggle against weariness and sleep, the pilot had a small shower system installed which allowed him to spray ice-cold water on his head. But events took a shorter and more tragic course. In attempting to takeoff from Floyd Bennett Field, the airplane failed to lift from the runway and crashed into a fence. In the tremendous explosion which resulted, the unfortunate Italian aviator was burned to death.

On looking back at this epoch, one might ask if Bellanca's reputation in aviation was confined only to these spectacular flights and aircraft. The answer is, not at all! These same aircraft in their commercial configurations, named the Pacemaker and Skyrocket, enjoyed considerable esteem and were widely accepted for private and light transport services in the 1930s. Larger models, named Aircruiser and Airbus, were also successful in the thirties. When the development of aviation led to the acceptance of the low wing design and the retractable landing gear, Bellanca produced his Model 28-70, a single-engined plane, especially designed for the MacRobertson Race, London to Melbourne, Australia, of 1934. It was unable to take part in the race, but on October 30, 1936, Captain James A. Molison flew the aircraft from St. Johns, Newfoundland to London in 13 hours, 17 minutes to write down for the eleventh and last time the famous name of Bellanca on the list of honor of Atlantic conquerors. Bellanca also built the 28-90, mail version of the 28-70, the 28-92 tri-engined racer and, after WW II, the light, four seat Cruisair and Cruisemaster of which several hundred were sold.

In spite of his continued success, the name of Giuseppe Mario Bellanca will live on in the memory of people as the creator of the airplane that made so much history in the years 1927 through 1934.