

## Glenn Curtiss and the Wright Brothers

In reading David McCullough's book "The Wright Brothers," I came across an interesting segment about Glenn Curtiss, a person of much interest to many of our society members. Glenn was of the Stratford, CT Curtiss family, growing up in Hammondsport, NY where his first interests in bicycles and motorcycles morphed into aviation. What follows was taken primarily from McCullough's book with the details of the lawsuit between the Wrights and Curtiss from Wikipedia.

In the summer of 1909, the world's first international air race was held in Rheims, France, totally financed by France's champagne industry. Its official title was "La Grande Semaine d'Aviation de la Champagne," and along with the European aviation stars were two of Wilbur Wright's French protégés flying French-built Wright planes, as well as Glenn Curtiss, who had been chosen to participate by the American Aero Club. The Wright brothers declined the offer to participate.



Glenn Curtiss at Rheims, France in 1909

At age thirty-one, Curtiss was a lean, shy, intensely serious competitor who, like the Wrights, had started out as a bicycle mechanic in his hometown of Hammondsport, then began building and racing motorcycles. He became the first acclaimed American motorcycle champion, "the fastest man in the world," achieving speeds on his motorcycle as high as 130 miles per hour.

His interest in aviation had begun when a balloonist named Tom Baldwin ask him to build a lightweight motor for a dirigible. Once, in September 1906, while in Dayton, Ohio, Baldwin and Curtiss had visited Wilbur and Orville Wright in their shop. Baldwin had thought Curtiss asked the brothers far too many questions, but, as he later said, the "had the frankness of schoolboys." The year after, Curtiss met Alexander Graham Bell, who made him "Director of Experiments" for the Aerial Experiment Association. In 1909, with a wealthy enthusiast, Augustus Herring, Curtiss formed the Herring-Curtiss Company to build flying machines. Those they built relied on movable flaps on the wings – ailerons, "little wings" – instead of wing warping which the Wright brothers had invented and patented, to control rolling and banking. The aileron idea had occurred earlier to a French engineer and had been tried successfully by other French designers. Alexander Graham Bell, too, had become

interested. It had already been described for all to see by the Wrights as an alternative to wing warping in their patent published in 1906.

Anyone want proof of the pace of change in aviation in the new century had only to consider that just one year before, in August 1908 at Le Mans, France, all the excitement had been about one man only, Wilbur Wright, flying one airplane before about 150 people to start with. In August 1909 at Reims, a total of twenty-two pilots would take off in as many planes, before colossal grandstands accommodating fifty thousand people.

Events at Rheims created an even greater sensation than promised. By the last days the crowds number 200,000. The contestants flew higher, farther, and faster than anyone ever had, breaking every record set by the Wright brothers. The biggest winner of the air race, the most celebrated of the contestants, was Glenn Curtiss, who won the prize for speed.

Overnight Glenn Curtiss was the new American hero. The following month, September 1909, Wilbur Wright signed on to make his first-ever public flight in the United States, in New York at the celebration commemorating the 300<sup>th</sup> anniversary of Henry Hudson's ascent of the Hudson River and the 100<sup>th</sup> anniversary of Robert Fulton's first steamboat on the Hudson. Glenn Curtis was also scheduled to participate in the celebration.

On Governors Island, just south of Manhattan, two hangers were provided, one for Wright and the other for Curtiss. When Curtiss arrived to look things over, he and Wilbur greeted each other cordially enough and talked for five minutes or so, mainly about the events at Rheims the month before. Curtiss soon departed for Hammondsport, where he was to be honored with an all-out homecoming.

Curtis returned from upstate late on September 28<sup>th</sup> and camped that night in the hanger of his plane in order to make an early test flight the next morning. He was up early made his flight shortly after six o'clock, with only a friend and one army officer as witnesses. He flew 300 yards, and then went back to upstate New York. Wilbur took full opportunity of the favorable weather and winds that day to make two test flights along the south side of Manhattan to cheering crowds. But it was the spectacle of Wilbur and his flying machine circling the Statute of Liberty that made the most powerful impression.



Wilbur Wright circling the Statute of Liberty in 1909

Glenn Curtiss returned to New York two days later but stiff winds out of the north kept both Wilbur and Glenn grounded for two days. By then, Curtiss announced he had to leave to keep a contract in St. Louis. This left only Wilbur to make the flight up the Hudson River that had been promised and all were waiting for.

With all their success first in France and then in the United States, the Wright brothers founded the Wright Company for the manufacture of airplanes, with offices in New York City and a manufacturing plant in Dayton, Ohio. With the similar start-up of other aviation companies, there were certain to be patent issues, one being with Glenn Curtis that escalated into a major law suit over patent infringements, which continued until well after Wilbur's death on May 30, 1912.

In 1908, the Wrights warned Glenn Curtiss not to infringe their patent by profiting from flying or selling aircraft that used ailerons. Curtiss refused to pay license fees to the Wrights and sold an airplane to the Aeronautic Society of New York in 1909. The Wrights filed a lawsuit, beginning a years-long legal conflict. The Curtiss people derisively suggested that if someone jumped in the air and waved his arms, the Wrights would sue. The brothers' licensed European companies, which owned foreign patents the Wrights had received, sued manufacturers in their countries. The Wright brothers won their initial case against Curtiss in February 1913, but the decision was appealed. In January 1914, a U.S. Circuit Court of Appeals upheld the verdict in favor of the Wrights against the Curtiss Company, which continued to avoid penalties through legal tactics.

The Wrights' preoccupation with the legal issue hindered their development of new aircraft designs, and by 1910 Wright aircraft were inferior to those made by other firms in Europe. Indeed, aviation development in the U.S. was suppressed to such an extent that when the country entered World War I no acceptable American-designed aircraft were available, and U.S. forces were compelled to use French machines.

The dispute continued for years and ultimately, in 1929 the two sides agreed to a merger. The Curtiss-Wright Corporation has changed dramatically over the past eight decades. Today it is an integrated, global diversified industrial company and remains a technology leader.