How Western New York Gave Wings to the World

--by M.E. Sterns

ON AUGUST 25, 1886, there was a report in the Buffalo Courier concerning a paper read before the American Association for the Advancement of Science, whose 35th annual meeting was held in Buffalo that summer. The paper, presented by a Mr. Lancaster, was on the subject of flight and the newspaper article noted that: "Some of the members of the association seem to be in a quandary as to whether Mr. Lancaster is a crank; or a sharp practical joker who has been giving the great association of America's savants guff. On Monday, as has been duly reported, they quite unanimously joined in reviling and laughing at him."

So was the subject of flight treated by some of the nation's most progressive scientific minds in 1886.

Fortunately, however, there were some who disagreed with the scientists of the time on the matter of flight --- men who could already see in their mind's eye the "flying contraptions" that were soon to be a reality. A group of these early air age enthusiasts lived in Buffalo during the latter part of the last century, and beginning with them, Western New York became an area where many of aviation's great firsts were performed or developed.

MOST OF THESE MEN originally belonged to one of the many cycling clubs that were formed in the Buffalo area in the late 1800's, among them the Buffalo Bicycle Club (sometimes known as the High Wheel Club), the Press Cycling Club, the Ramblers, the East Side Cyclers and the Eldredge Club, of Tonawanda. These clubs reached the peak of their cycling activity in the 1880's and then began to develop interest in ballooning and racing pigeons. Eventually some turned their interest to automobiles, while others experimented with winged flight.

From these bicycle, pigeon and motor clubs came the flying group that was the nucleus of the Aero Club of Buffalo --- the oldest aero club in America and second oldest in the world. Although the club was not officially incorporated until 1910, its members had for many years been actively engaged in the mechanics of flying. Some were trying to build bicycles with wings others were studying the flights of pigeons and a few had progressed to where their machines were crashing quite regularly.

The early Aero Club members would take their inventions out to the grounds of the Country Club of Buffalo (now the Grover Cleveland golf course at Bailey and Main) to try them out. John M. Satterfield, the "father of aviation" in Buffalo and the first president of the Aero Club said, "We organized when the Wright brothers were still experimenting with their Walloping Windowpane!"

THE AERO CLUB brought the first dirigible to Buffalo in 1906.
It is recorded that "Every street car on Main Street was stopped and all the children were let out of school to watch it. For two hours you couldn't get a telephone connection because everybody was at the windows." Four years later, in April 1910, the first airplane flight in the area took place. An airplane designed and flown by Mr. A. L. Pfitzner was brought to Buffalo by the Aero Club and flown from the Country Club polo grounds. A few months later, on the evening of July 26, 1910, a Mr. J. G. Jones flew a plane he had built and subsequently crashed it in front of 432 Bird Avenue. The following day, Mr. Jones came back to claim the wreckage and haul it home.

Such happenings were becoming so commonplace, that an article in the October 1910 issue of Buffalo Motorist advised: "Because of recent aviation accidents and fatalities ... (it has been) suggested that aviators wear a pneumatic helmet to protect the head in case of falls."

It was in this same year that Blanche Stuart, of Rochester, the first American woman pilot, performed her first solo flight.

While most of these early experiments were individual efforts, an historic and most successful group of aviation enthusiasts was formed about this time in the little Finger Lakes town of Hammondsport, N.Y., about 115 miles from Buffalo. In 1907, Glenn Hammond Curtiss, a motorcycle manufacturer, joined Dr. Alexander Graham Bell, F. W. Baldwin, Jr., J. A. D. McCurdy and Lt. Tom Selfridge to form the Aerial Experimental Association (A.E.A.). Dr. Bell had always been interested in aviation and Curtiss had the ability to build a good light-weight engine and the manufacturing facilities to build planes.

On March 12, 1908, the "Red Wing," the first Curtiss-built biplane took off from the ice of Keuka Lake. Subsequently, the association built the "White Wing" and the "June Bug", which was the craft that made the first officially recorded flight in the United States and in which Curtiss won his first laurels as a flyer. By 1910, Glenn Curtiss had been permanently awarded the Scientific American Trophy for his flight from Albany to New York City.

At the time of the A.E.A. experiments, the Wright brothers had already been awarded their patents, and they immediately threatened suit against anyone building an airplane. Dr. Bell, having already gone through arduous litigation in regard to the patent of the telephone, did not wish to engage in a similar fight with the Wright Brothers. Therefore, the A.E.A., as such, was dissolved, but Curtiss continued on his own.

In January, 1910, an historic meeting occurred at the headquarters of the Aero Club of Buffalo between Glenn Curtiss and the Wright brothers. Both parties had appeared to give testimony in the suit the Wrights brought against Curtiss for what they claimed was infringement of their patents. (Later the U.S. District Court of Appeals vacated the injunction, thus allowing anyone who wished to build a plane to do so.)

During the 1908-1914 period, the Hammondsport area became the only area in the world that was commercially engaged in the development of aircraft. It was the first large manufacturing site for planes and it had the first large training school for pilots and the first large training school for aircraft designers.

Lincoln Beachy, one of the most famous of the early stunt flyers, was taught to fly by Glenn Curtiss, and later became one of his test pilots. In 1911, Beachy flew a Curtiss biplane --- the first plane ever to be "looped". In the same year, he thrilled a crowd of 20,000 people at the Buffalo Aviation Meet by taking off from the Old Driving Park on Ferry Street and Humboldt Parkway, heading for Niagara Falls and swooping down into the gorge beneath the old "Honeymoon Bridge."

At the outbreak of World War 1, Curtiss received requests from the Allied powers for the various training planes he had developed. He realized he would have to move to an area with a much larger labor force than was available in Hammondsport. So in December, 1915, Curtiss came to Buffalo and rented the Thomas Flyer Automobile Manufacturing Plant on Niagara Street. This is where he developed the R-model airplane which was the forerunner of the famous Curtiss "Jenny." Curtiss soon moved to a plant he built on Churchill Street. He also rented several other facilities and ultimately built the plant at 2050 Elmwood Avenue.
At the close of World War 1, Curtiss built four flying boats capable of trans-ocean flight. These boats were the first NC series, and the NC-4 was eventually successful in circling the globe.

At the same time Curtiss was moving his operation to Buffalo, 40 members of the Areo Club formed the nation's first flying squadron, with all funds for planes and other equipment coming from the members' own pockets. One of these men was Nathaniel E. Duffy (Director of Buffalo Airport 1927-1960) who became the first American flyer to fight in World War 1, joining the famed Lafayette Escadrille of France.

Curtiss continued to operate in Buffalo until Armistice Day in 1918, when he closed the Buffalo facility and moved his plane Manufacturing to Garden City, Long Island. Curtiss did not return to Buffalo until the early 1930's at which time he built the plant on Tonawanda Street until recently occupied by the Western Electric Company.

During the 1920s, however, The Curtiss Aeroplane Co. still operated hangars and flight facilities at the intersection of Sheridan Drive, Niagara Falls Boulevard and Eggert Road. It was here that a young mechanic, Michael F. Steffen, took his first flying lessons.

Later, it was through Steffen's efforts that another aviation first for the Buffalo area was accomplished. This was the establishment of an aviation mechanic's program at Burgard Vocational High School. Steffen's program was the first federally certified aviation mechanic's program in a public school in the United States.

IN THE MEANTIME, other aircraft industries and associated businesses continued to come into Western New York. In June, 1919, Leslie L. Irving organized the Irving Airchute Company. Irving made the first successful descent in a free-type parachute, which was the forerunner of the parachutes used today.

Consolidated Aircraft, headed by Major Rubin Fleet, came to Buffalo in 1924 and occupied space in the old Curtiss plant at 2050 Elmwood. In March, 1928, Major Fleet induced Lawrence Bell to join his operation. During the period that Consolidated operated in Buffalo, the naval flying boats were developed. The last of these designed and built in Buffalo was the PBY of World War II fame.

Consolidated Aircraft moved to San Diego in 1935 and ultimately became part of General Dynamics. At this time Lawrence Bell chose to remain in Buffalo, and together with Bob Woods, formed Bell Aircraft.

Other airplane companies also began operation in the area during the 1920-1940 period, among them Scott Aviation, Argonaut Aircraft Company, the Gwinn Aircar Company and the Wendt Aircraft Corporation.

Later Bell Aerospace and Cornell Aeronautical Laboratory (now Calspan) provided many more "firsts" as aviation progressed into the jet and space ages. These and others like Curtiss Wright, Buffalo Aeronautical, the aviation divisions of Carborundum and National Gypsum remain in the area today.

This spring [This article was written in 1976, ed.], Buffalo International Airport will celebrate its 50th anniversary, concurrently with the nation's Bicentennial. The celebration will be an appropriate reminder that the Buffalo and Western New York area is rich in the aviation history of the nation and the world.
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Visit the Glenn H. Curtiss Museum of Early Aviation and Local History of Hammondsport, N.Y.