

## Aviation Pioneer Glenn Curtiss By Fran Buckley



Glenn Curtiss (Glenn Curtiss Museum)

At the turn of the twentieth century, technological marvels were arriving at the doorstep of the world with increasing frequency. Horseless carriages sputtered down the roads and the iron horse ran on five systems of transcontinental railway connecting the entire country from east to west. The world was on the move. It would be more than another decade before the United States threw itself into the fray in Europe that would be known as World War I, and it was a natural time for the imagination of engineers to turn to the skies.

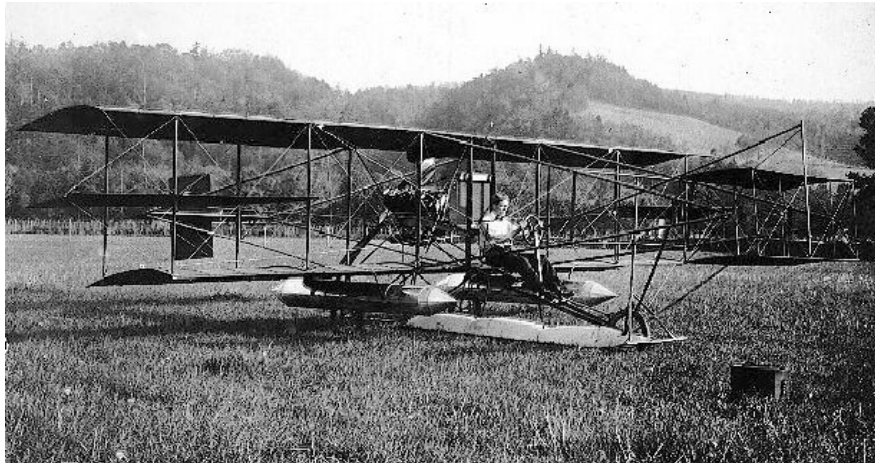
The Wright brothers, Wilbur and Orville, knew their way around a wrench and a welding torch. Their successful bicycle-building business gave them the extra income to tinker with the internal combustion engine and to start their aeroplane venture. But the Wrights weren't the only engineers and adventurers with an eye on the sky; they were just the first to get into the air, and they did not cultivate publicity.

Born in Hammondsport, NY, in 1878, Glenn Hammond Curtiss developed his own “extreme hobby” involving getting humankind to fly. From his teens he had an obsession with things mechanical as well as with bicycle building and bicycle racing. For a short time he built the Hercules motorcycle, and in 1907 one of those cycles with a V-8 engine was clocked at 136.36 mph (219.45 km/h), earning him the gratifying nickname of Fastest Man on Earth.

When a balloonist contacted Curtiss to collaborate on a motor to power a dirigible, Curtiss's career in aviation took off. He was soon a member of the Aerial Experiment Association, a group of inventor-experimenters that included Alexander Graham Bell. In 1908, the association's *Red Wing*, a rudimentary heavier-than-air flying craft, took flight for 20 seconds before it banked and crashed. Curtiss figuratively dusted himself off and two months later piloted the *White Wing* for more than 1,000 feet, much better stabilized with the first version of the aileron mounted to its wingtips.

Boosted by these seemingly small, but extremely crucial, successes, Glenn Curtiss began to pile up milestones in aviation. In 1908 he flew his *June Bug* in a Scientific American trophy competition and well exceeded the requisite one kilometer of flight. The next year, the *Golden Flyer* covered almost 25 miles and won Curtiss the second part of the Scientific American trophy. It seemed that Curtiss's ambition, inventiveness, and talent were boundless.

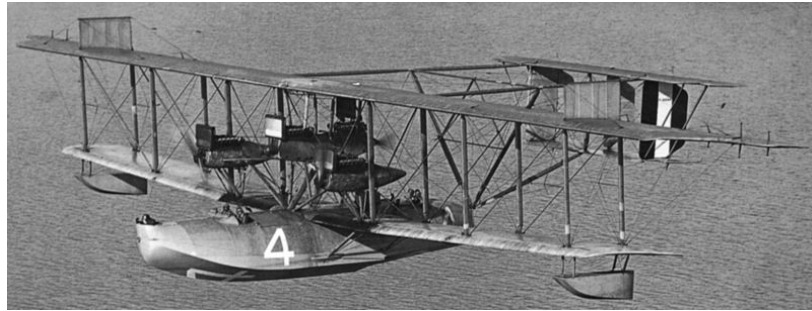
People were building airplanes all over the world by now. Later in 1908, Curtiss went to France and won a speed trial, clocking 46 mph. 1910 saw him back in the states in pursuit of the *New York World* competition to fly from Albany to New York City, a distance of 137 miles—and not only did his plane, the *Hudson Flyer*, win the race, but with this victory he completed his sweep of the Scientific American trophy competition, secured his reputation as the foremost figure in the fledgling industry, and showed the world that air travel could be practical. That same year, he trained the first woman pilot, [Blanche Stuart Scott](#).



Glenn Curtiss's Hudson Flyer (Glenn Curtiss Historical Society)

Before World War I ramped up, Curtiss became involved with the US Navy through his newer fascination with and participation in the development of seaplanes. He also worked with the navy on the idea that airplanes could be used for more pinpointed delivery of bombs: aerial bombing was born. Curtiss made a plane that could take off from and land on the deck of a cruiser, birthing the first aircraft carrier operation. At the end of 1910, Curtiss established a winter encampment at San Diego to teach flying to Army and Naval personnel, establishing Naval Air Station North. Here he developed the pontoon design, enabling planes to take off from and land on water, and later invented an amphibious craft, the A-1 *Triad*.

When Great Britain became fully involved in World War I, Curtiss sold the Royal Navy several models of the *America*, which came to be called the *H-4*. Later on, Curtiss modified this plane and sold it to American forces as the *F5L*. A larger version of the *America* eventually evolved into the *H-12*, the only American-designed and -built aircraft that went into combat in that war. And when it looked as if the United States was not going to avoid involvement in the war, Curtiss created the subsequently famous small two-seater training planes, the *JN-4*, or “Jenny,” for the Army and the *N-9* seaplane for the Navy. In 1917, Curtiss accepted a Navy commission to design, in cooperation with a British naval officer named John Porte, a larger “flying boat,” the famous *NC-4*. The biggest triumph for this craft, and one more jewel in Curtiss's crown of publicity, was its successful crossing of the Atlantic Ocean, nonstop, in 1919. Glenn Curtiss was well on his way to earning the exclusive titles of Founder of the American Aircraft and Father of Naval Aviation.



Glenn Curtiss's NC-4 (US Navy Photo)

After the war ended, Glenn Curtiss started racing again—racing aircraft instead of motorcycles and winning the [Schneider Cup](#) in both 1923 and 1925; the 1923 craft was a Curtiss **CR-3** that made a record 177.266 miles per hour (285.282 km/h) and in 1925 another Curtiss, the **R3C-2**, clocked in at 232.573 mph (374.289 km/h).

The man didn't stop there. He went on to develop, indeed to build, three Miami-area towns in Florida. Then, on July 23, 1930, as he was undergoing minor surgery in Buffalo, New York, he developed a fatal blood clot. Glenn Hammond Curtiss was only 52.

Sources:

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