



The Austin Company Takes Flight

By 1916, *The Austin Method*® already had been a standard operating practice for more than a decade at The Austin Company in Cleveland, Ohio. The concept of combining design and construction services into one firm was more than just unique, it was proving to be tremendously successful. In the development of manufacturing sites across the Midwest, the concept was tried and true. And, with an enormous project with Glenn Curtiss (the “father of American aviation”), *The Austin Method*® was about to propel the innovative company into aviation history.

The war in Europe had been raging since the summer of 1914 and the United States was preparing for the possibility of joining its allies against Germany in World War I. Despite the fact that airplanes were still very new, forces on both sides of the war recognized their potential power in

battle. It was imperative that the U.S. Army and Navy have airplanes and pilots ready.

In 1916, Curtiss’s company — the Curtiss Aeroplane and Motor Corporation — was selected by the U.S. government to begin manufacturing planes that would be used to train Army and Navy pilots. Curtiss was a visionary in the aviation industry and he understood that his existing plant in Hammondsport, NY was too small to handle the production load. He purchased a 28-acre site on Elmwood Avenue in Buffalo, NY and was eager to get started with construction of the facility.



Glenn Curtiss, founder of the Curtiss Aeroplane and Motor Corporation.

Curious about Austin’s ad in a 1916 edition of *The Literary Digest*, a Curtiss representative traveled 190 miles west to Cleveland to learn more about the firm’s ability to rapidly — and cost-effectively — design and build large manufacturing facilities. Curtiss was looking to partner with a firm that could deliver results, not excuses. After the meeting, Austin engineers committed to Curtiss that they would design and construct a gigantic 540,000 square-foot facility and a 63,000 square-foot plant within 120 days.

“In 1916, we were one of the few companies in the U.S. that would integrate design and construction,” explains Mike Pierce, president of The Austin Company. “It was wartime and production moved quickly. There was an unbelievably aggressive schedule.”

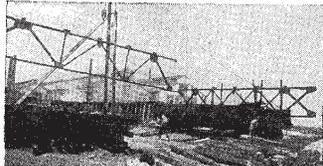
The Austin Method®

Originated in 1904, *The Austin Method*® design-build approach provides a single-source solution for all facility planning, design, and construction services, and assumes undivided responsibility for budget, schedule and quality. This method conserves two of the most precious project resources — time and money, through a comprehensive two-step process. To learn more about the process, go to <http://www.theaustin.com/austin-method>.

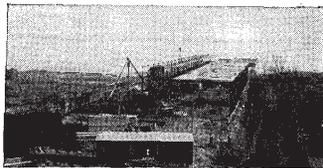
Curtiss Aeroplane and Motor Corporation.



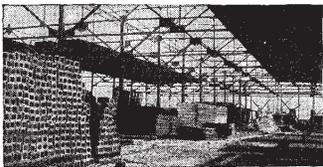
How a Big Factory-Building is Constructed in 30 Working-Days



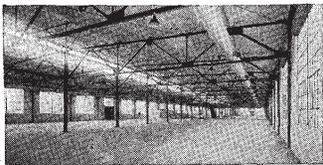
Unloading steel before foundations were completed



Roofing begun before steel-erection was completed



Tile and steel sash delivered before steel was all up



Building completed and waiting for owner's machinery

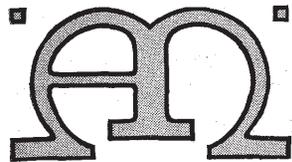
READINESS *ahead of time*—pre-preparedness, in a word—is the key-note of the Austin Standard 30-Day Construction that is effecting a revolution in industrial building.

With everything ready in advance—types standardized, plans drawn, specifications prepared, costs figured, construction-units pre-fabricated for quick assembly—we can construct any one of three types of Austin Standard Factory-Buildings in 30 working-days; two 60-day types; two others, multi-story types, in slightly more time.

The pictures show the progress of an Austin Standard No. 3, 100x400 feet, steel and tile construction. They afford graphic proof of the effectiveness of Austin pre-preparedness in producing quality in quick time at low cost.

We have never failed to meet the 30-day schedule for an Austin Standard Building.

Write, phone or wire for illustrations and brief specifications of the seven types of Austin Standard Factory-Buildings, in convenient form for your files



The Austin Company
INDUSTRIAL BUILDERS

Cleveland, Ohio

Bridgeport, Conn. Niagara Falls, Ont. Jackson, Mich.

Export Representative: John Bennett Bissell
50 Broad Street, New York

As design of the buildings was continuing, construction began in an area covering almost 10 city blocks in Buffalo, New York. The project included design and installation of heating, plumbing and sewage systems; lighting and millwrighting.

By early 1917, Austin delivered on its promise to complete the project

within 120 days. In fact, the firm beat the deadline — having the buildings ready in 90 days. It was an astonishing feat — designing and erecting a manufacturing facility that was nearly 30 acres under one roof.

Glenn Curtiss, owner of the Curtiss Aeroplane and Motor Corporation, was ready to begin production of the JN-4

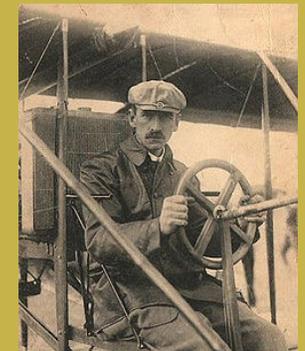
Glenn Curtiss: The Father of American Aviation

Glenn H. Curtiss was absolutely fascinated with flight. In fact, he dedicated his career to building America's aviation industry.

His early career focused on racing and building bicycles and then later developing motorcycles. Curtiss began manufacturing engines for airships in 1904 and a few years later joined the Aerial Experiment Association, a research group founded by Alexander Graham Bell that was building flying machines.

As the aviation industry began, Curtiss's name was connected with remarkable "firsts". He made the first officially witnessed flight in North America, won a race at the world's first international air race in France, and made the first long-distance flight in the U.S.

By the time Curtiss was 38 years old (in 1916), his amazing accomplishments and reputation as an aviation visionary awarded him a contract with the U.S. government to build thousands of airplanes that would be used to train WWI pilots. His company, the Curtiss Aeroplane and Motor Corporation, buildt aircraft for the U.S. Army and Navy, and prior to WWI, Curtiss's seaplane experiments led to advances in naval aviation.



aircraft needed to train WWI pilots.

More than 18,000 workers filled the Buffalo complex — and for more than a year and a half, the team assembled nearly 7,000 JN-4 (“Jenny” and “Canuck”) airplanes that were sold to the U.S. Air Service and Royal Flying Corps (Canada and Great Britain). Although the JN-4 was not used in combat, it is estimated that 95 percent of American and Canadian WWI pilots were trained in the “Jenny” and “Canuck” airplanes.

The JN-4 was a twin-seat dual-control biplane which featured a 90 hp Curtiss OX-5 V8 engine which allowed the airplane to reach a top speed of 75 mph and a service ceiling of 6,500 feet. Pilot training was enhanced with the JN-4 because of its tractor propeller and

maneuverability.

The “Jenny” was also easily adaptable — allowing it to be modified to serve as the first aerial ambulances during WWI and through the 1920s. In Canada, the JN-4 was adapted in winter months to feature a ski undercarriage so that the airplane could be used year-round.

Following WWI, civilians took to the air in the thousands of surplus “Jennys” that were sold by the U.S. Army. In fact, Charles Lindbergh bought a JN-4 in May, 1923. The airplanes were extremely popular for stunt flying and aerobatic displays during the barnstorming era of the 1920s. The “Jenny” was also being used for commuter services, photo-mapping, policing, forest patrol and real estate work.

Like the famous “Jenny,” Curtiss’s sprawling aircraft plant in Buffalo was so well-designed and adaptable that it continued to serve as an aircraft production plant through World War II, as well.

In its 100-year history, the building has been home to:

- Curtiss Aeroplane and Motor Company
- Curtiss-Wright Corporation
- Bell Aircraft Corporation
- M. Wile Clothing Co.
- Home Depot



The JN-4, or “Jenny”, twin-seat dual-control biplane.

Sources:

- The Austin Company archives
- National Air and Space Museum
- Wikipedia
- www.glenncurtissmuseum.org
- www.britannica.com/biography/Glenn-Hammond-Curtiss

