Charles & Anne Morrow Lindbergh

Their Lives & Times The Formative Years Gerard L. Blake, October 2019

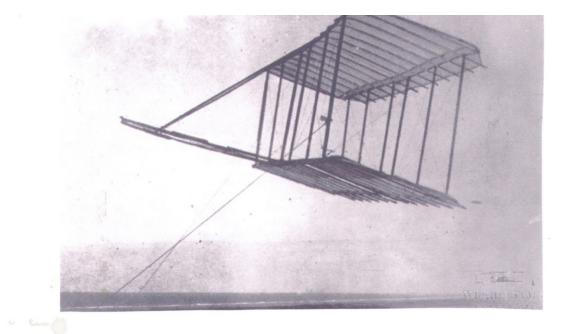


Charles Lindbergh's Swedish Roots

Around 1859 scandal drove Charles Lindbergh's paternal grandfather—Ola Mansson— to America where he and second wife, Louisa, raised their family. He changed their surname to Lindbergh and called his first born (standing) Charles August.

The Year is 1900

- The population of the United States is about 70 million.
- William McKinley is the President.
- The first auto show in the United states is held at Madison Square Garden in New York City.
- Early September two brothers from Dayton, Ohio take their first man carrying glider to Kitty Hawk, NC for tests. It did not fly very well.



The Wright 1900 Glider being flown at Kitty Hawk as a kite.



In September 1900 Evangeline Land leaves Detroit, Michigan for Little Falls, Minnesota to teach high school science. She is 24 years old.



Little Falls, Minnesota

- Located in central Minnesota near the southern edge of the great northern pine forest.
- Near one of the largest falls on the Mississippi River.
- A Euro-American settlement is established in mid-1840. Logging is the primary enterprise.
- The population in 1900 is between 5000 and 6000 people.



On the day Evangeline Land arrives in Little Falls, she is introduced to Charles August (C. A.) Lindbergh, a Little Falls lawyer and real estate broker. He is 42 years old.

- By January 1901 C. A. and Evangeline are engaged.
- They marry in Detroit, Michigan on March 27 1901.
- After a 10 week western honeymoon, they return to C. A.'s 120 acre farm located on the left bank of the Mississippi River in Little Falls.



Reconstructed Lindbergh house in Little Falls. The original house burned to the ground in 1905.



Charles Augustus Lindbergh is born February 4, 1902 in Detroit, Michigan.

Tensions in the Marriage

- In 1901, C. A.'s two daughters, from a previous marriage, come to live with C.A. and Evangeline.
- In 1905, C.A.s financial situation becomes critical due to land holdings acquired through bank loans.
- In 1907 C. A. is elected to the U.S. House of Representatives. He leaves Little Falls for Washington D.C.
- C. A. Lindbergh, Evangeline and Charles A. Lindbergh will never live together as a family again.

THE MORROWS & THE LINDBERGHS



Dwight Whitney Morrow and Elizabeth Reeve Cutter Morrow, parents of Anne Spencer Morrow. .

Dwight W. Morrow

- Born in Huntington, WV. 1873.
- Graduate of Amherst College and Columbia Law School.
- Marries Elizabeth Reeve Cutter in 1903.
- Becomes a partner in J.P. Morgan & Company.

J. P. Morgan & Company

- One of the most powerful banks of this era.
- Financed railroads, helped to organize U. S.
 Steel, General Electric, General Motors and other major corporations.

Elizabeth Reeve Cutter Morrow

- Born in Cleveland, Ohio in 1873.
- Daughter of Charles L. Cutter & Annie E (Spencer) Cutter.
- Graduated from Smith College in 1896
- Studied at the Sorbonne in Paris and Florence Italy from 1896-87.

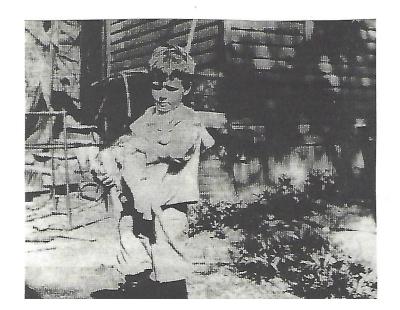


Anne Spencer Morrow 1 year old, 1907.

Pictured here with her Grandmother.



Charles Lindbergh age 6, with mother Evangeline. 1908



Charles Lindbergh with Fluff the cat



Charles Lindbergh Hunting With 22 Caliber Rifle



A Happy Moment On The Upper Mississippi



Charles Lindbergh, age eleven, with father, 1913



Charles at White House Easter egg rolling 1913



The Morrow Family 1913

Dwight, Elizabeth, daughters Elizabeth & Anne, son Dwight Jr., daughter Constance.



Anne Spencer Morrow, 1915 age 9

Charles Lindbergh 1906-1919

- During these years Charles lives with his Mother and, except for periodic visits, separate from his father.
- He attended schools in Washington, D. C., Redondo Beach, CA and Little Falls, MN.
- In his high school senior year he is back in Little Falls and successfully running the family farm.
- World War 1 gives him the opportunity to leave school early to provide food for the war effort and still obtain his diploma without any examinations.



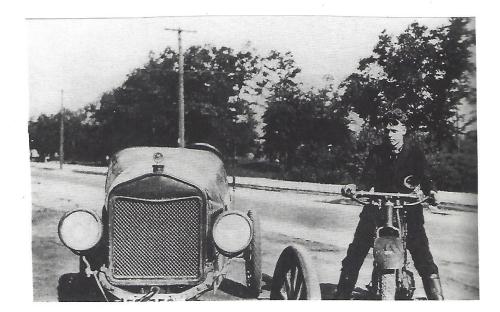
The old Ford, Maria

In 1916 fourteen year old Charles Lindbergh drove his mother, in this car, from Little Falls, Minnesota to Los Angles, California. The trip took forty days.



Lindbergh, age 18, at the University of Wisconsin, 1920

Charles enrolls in the University of Wisconsin to study engineering. His mother moves to Madison to be with him at university. He is asked to leave in his Sophomore year.



Charles Lindbergh at College

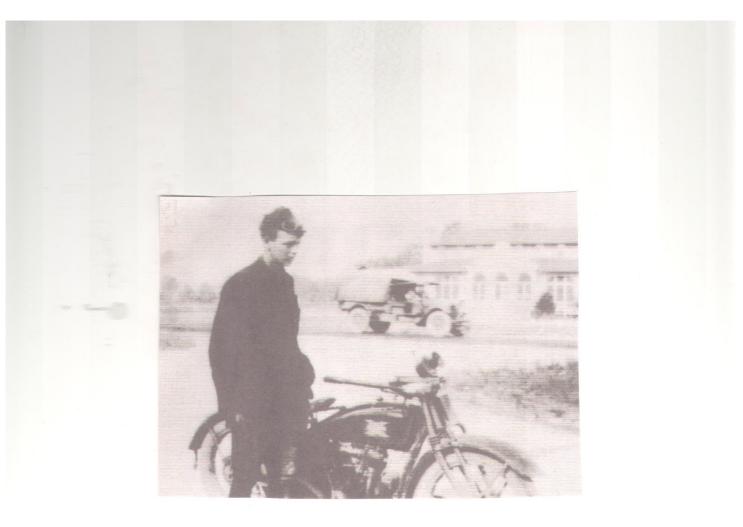


Charles Lindbergh with ROTC pistol team 1921



The Morrow Children, 1920

Elizabeth, Anne, age 14, Dwight Jr., Constance. Anne attends Miss Chapin's School in New York City.



Charles Lindbergh with his Excelsior Motorcycle.

In March 1922 Lindbergh leaves Madison, WI. on his motorcycle and rides to Lincoln, Nebraska. He enrolls in the Nebraska Aircraft Corporation to learn how to fly.

Charles Lindbergh 1922

- C. A. Lindbergh pays for tuition at the Nebraska Aircraft Corporation (N A C).
- On April 3, 1922 Charles begins his training at NAC by helping to recondition some of their airplanes. He replaces aircraft fabric covering, replaces engines and helps in aircraft reassembly.

Charles Lindbergh 1922

- On April 8, 1922 Charles takes his first airplane flight in a Lincoln Standard Tourabout. He shares the front passenger cockpit with 16 year old Harland "Bud" Gurney, who will become a life long friend.
- By the end of May 1922 he had received about eight hours of flight instruction.
- The only airplane the NAC has for flight instruction is sold to Lincoln pilot Erold G. Bahl who plans to barnstorm the airplane throughout the mid west.



Charles Lindbergh & Bud Gurney 1922

- With no airplane available for flight training Lindbergh joins Erold Bahl as an unpaid assistant for his mid-western barnstorming tour.
- From May to October, through Nebraska, Kansas, Colorado, Wyoming and Montana, He sells airplane ride tickets, helps to maintain the airplane, becomes a wing walker and a parachute jumper.



Anne Spencer Morrow, 1922 age 16

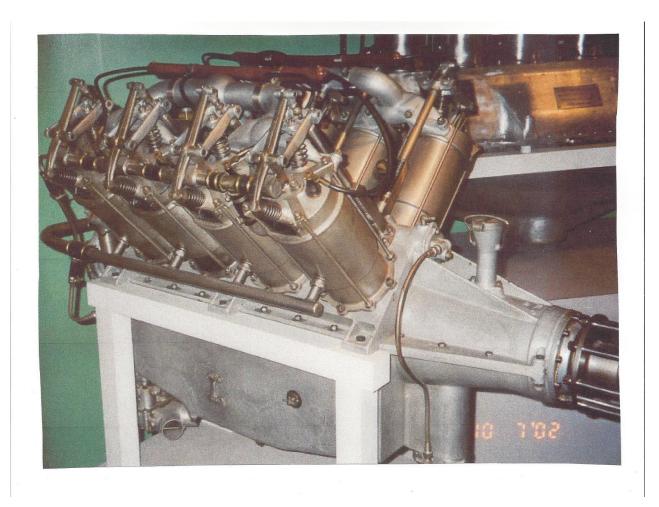
Photograph of Anne when she was a student at Miss Chapin's School in New York City.

- While visiting his father, C.A., in February 1923, Charles decides to purchase a government surplus airplane and join the barnstorming circuit. C.A. agrees to underwrite the airplane purchase.
- On April 20, Charles travels to Americus, GA where war surplus airplanes are warehoused at an airport named Souther Field.

- Lindbergh purchases a rebuilt Curtis JN4-D "Jenny" with a brand new Curtis OX-5 engine, an extra 20 gallon fuel tank for \$500.00.
- It takes two week to assemble the airplane.
- With only 8 hours of flight instruction, and never having soloed, Lindbergh attempts a flight but aborts his first attempt to take-off.
- A pilot named Henderson offers to fly with him and after a half-dozen takeoffs and landings Lindbergh got the hang of it.



Curtis JN4-D, cost to government in 1917, \$8160.00 Wing span upper- 43 ft. 8 in. lower 33 ft. 11 in. Length- 27 ft. 4 in. Max Wt. 1920 Lbs. Max speed- 75 MPH. Engine- Curtis OX-5, liquid cooled, 90 BHP.



Curtis OX-5

Four stroke/cycle, V-8 configuration, liquid cooled 90 Brake Horsepower @ 1400 RPM. The first mass produced aircraft engine in the United States.

- After spending another week at Souther Field practicing takeoffs and landings, Lindbergh heads north to Minnesota barnstorming on the way.
- In 1923 there were no regulations governing the aircraft industry in the United States.
- C.A. is running for a seat in the U.S. Senate and they are going to use the airplane to campaign around the state.



C.A. Lindbergh campaigning in northern Minnesota



On the campaign trail June 8, 1923.

C.A., Charles and bystanders assess damage to the Jenny when it ran into a ditch on takeoff from a farm near Glencoe, Minnesota.

- C.A. Lindbergh looses the election to the U.S. Senate. He dies in May 1924, age 66.
- Charles recognizes the need for professional training in order to become an accomplished pilot.
- He applies to the Army Air Service to be a military pilot and completes the physical & mental exams at Chanute Field on January 8, 1924.

Anne Spencer Morrow 1924

- Anne graduates from Miss Chapin's School in June 1924.
- She enters Smith College in the Fall.
- Soon her poetry and writings begin to appear in the literary magazine, "The Smith College Monthly."

Charles Lindbergh 1924/25

- Charles continues barnstorming through the Midwest and is notified to report to Brooks Field, San Antonio, Texas for flight training by March 19th.
- With a clear cut objective of becoming a military pilot, Lindbergh sells his barnstorming Jenny and applies himself to the rigors and discipline of military flight training.
- He graduates first in his class and is assigned to Army Reserve status.



Lindberg sitting atop an ammo dump Brooks Field, Texas, 1924



Second LT. Charles A. Lindbergh, March 14, 1925

Just eight days before graduation Lindbergh is involved in a mid-air collision. He parachutes to safety, the other cadet is killed.

- Charles decides to go to St. Louis, Missouri to pursue his aviation career and arrives in late March 1925.
- Shortly after arrival he is offered the job of "Chief Pilot" for the airmail route that Frank and William Robertson, Owners of The Robertson Aircraft Corporation, had bid for.
- Until the airmail route is awarded, Lindbergh gives flight instruction and airplane rides to earn a living.

- ON June 2nd he performs the initial test flight of a new commercial four passenger airplane known as the OXX-6 Plywood Special.
- Instability prevents the airplane from recovering from an intentional left spin and Lindbergh again takes to his parachute.
- He lands hard in a potato patch dislocating his shoulder.



The Vital Parachute



Just before take-off in the Plywood Special June 1925



After parachute landing June 2, 1925

This was the second time that a parachute saved his life.



For the summer of 1925 Lindbergh becomes a member of the Mile-HI Airways and Flying Circus in Denver, Colorado.

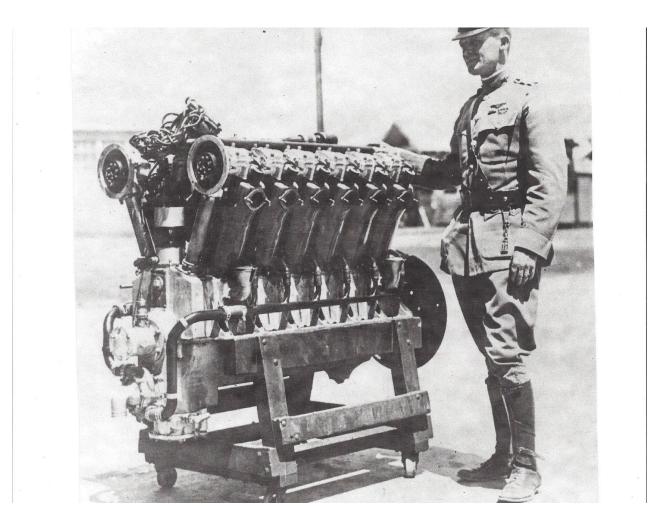
- In October 1925 The Robertson Aircraft Corporation is awarded Contract Air Mail route 2, (CAM-2) the Chicago to St. Louis run.
- Lindbergh returns to St. Louis and, as chief pilot, begins to survey the route and to arrange for landing and emergency fields along the way.

- He joins the 110th Observation Squadron of the Missouri National Guard.
- Robertson Aircraft builds a new aircraft hangar and acquires five surplus DH-4 airplanes to be converted to mail planes.
- Lindbergh recruits two additional pilots for the CAM 2 mail route.



DH-4 Specifications

- Designed by Geoffrey de Havilland as a two seat day – bomber.
- Wing span- 42.5 ft.
- Length-30.0 ft.
- Max Weight- 4400 pounds.
- Cruise Speed- 125 MPH
- Engine- 400 BHP Liberty
- Total manufactured-4846.



400 BHP Liberty engine with Maj. Hap Arnold.

Twelve Cylinder, liquid cooled V-12 engine. Designed by a group of auto engineers in a Washington hotel room in one weeks time. The most powerful aircraft engine of its time.



CAM-2 Pilots C. Lindbergh (2nd from right) and Phil Love (2nd from left) at Springfield, IL airport on a mail route proving flight. April 10, 1926



C. A. Lindbergh Chief Pilot



Starting the CAM-2 Air Mail Service

Lindbergh flew the inaugural CAM 2 mail flight from Chicago to St. Louis on April 15, 1926.



Lindbergh Transferring Mail 1926



Charles Lindbergh & DH-4 Mail Plane

Winter flying garb.

Charles Lindbergh Summer 1926

- By the summer of 1926 Lindbergh is becoming bored with flying the repetitive air mail route.
- He confesses to his mother, "I am getting tired of the monotony of flying around St. Louis and unless something new turns up I expect to leave here next May.

The Hazards of Flying the Mail.

- On September 16, 1926 Lindbergh takes off from St. Louis and makes his stops at Springfield and Peoria, Illinois.
- He departs Peoria at 5:55 PM in a light haze. Night falls and by 7:15 fog obscures the ground.
- He turns back toward Peoria but it is totally fogged in. He runs out of fuel at 8:40 and takes to his parachute.



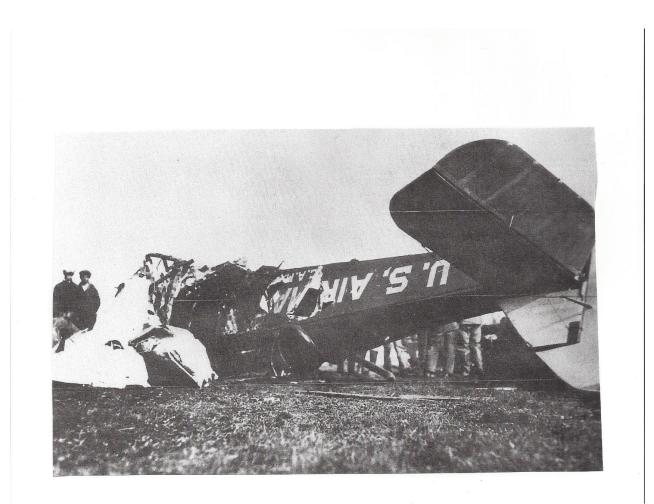
Standing by Wreckage of DH-4 September 16, 1926 Charles Lindbergh, 2nd from left, his parachute saved his life for the third time.

Charles Lindbergh Fall 1926

- While droning along on his mail route he begins to dream of other aviation possibilities.
- "If I only had the Bellanca, I'd show St. Louis businessmen what modern aircraft could do."
- "I could fly nonstop between New York and Paris," and win the \$25,000.00 Orteig prize.
- He begins to explore ways to raise money to purchase a Wright-Bellanca.

The Hazards of Flying the Mail.

 Six weeks after his September incident and on the same Springfield-Peoria leg, Lindbergh runs into rain and snow and he bails out for the forth time.

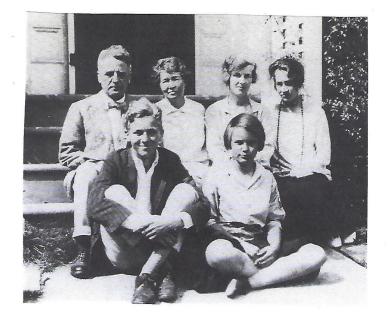


Wreckage of Lindbergh's DH-4 November 3, 1926

A parachute saves his life for the forth time.

Anne Spencer Morrow Fall 1926

- At Smith College Anne begins to emerge as a gifted poet and writer. In her junior year this poem appears in The Smith College Monthly.
- I should like to be a dancer,
 A slim persuasive dancer,
 A scarlet Spanish dancer,
 If you please!....



The Morrow Family 1926

Charles Lindbergh November 1926

- On November 26 Lindbergh travels to New York City and confers with Giuseppe Bellanca about purchasing a Wright-Bellanca airplane.
- Bellanca is vague in answering questions about production of an airplane but assured Lindbergh that it could stay aloft for 50 hours.



Wright-Bellanca WB-2, 220 HP Wright Whirlwind J-5 engine.

This is the actual Bellanca airplane that Lindbergh wanted to buy.

Charles Lindbergh December 1926

- Lindbergh talks with St. Louis businessmen Harry Knight and Harold Bixby about his proposed flight to Paris.
- They agree to raise \$15,000.00 to support the flight.
- On December 26, Lindbergh writes his mother, "The N.Y. to Paris flight is gradually taking shape and it is now quite probable that we will have a St. Louis expedition ready to hop off from New York next spring."

Charles Lindbergh 1927

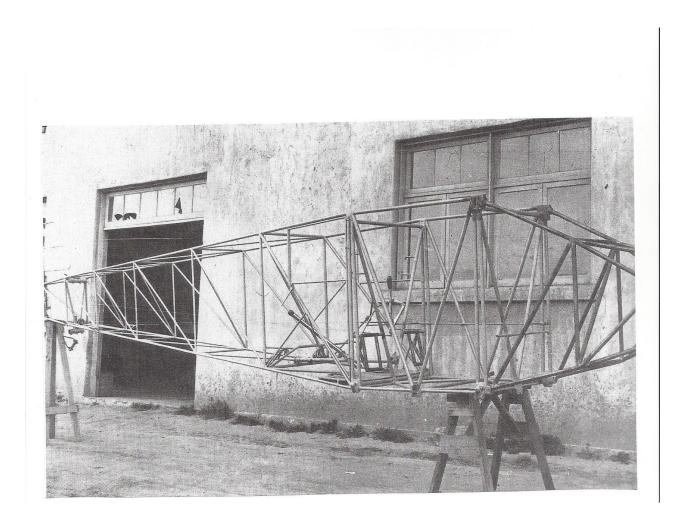
- Unable to count on buying the Wright-Bellanca and Travel Air refusing to take his order, on February 3, Lindbergh wires the Ryan Aeronautical Company in San Diego, California.
- "Can you construct whirlwind engine plane capable of flying nonstop between New York and Paris STOP If so please state cost and delivery date."

Charles Lindbergh 1927

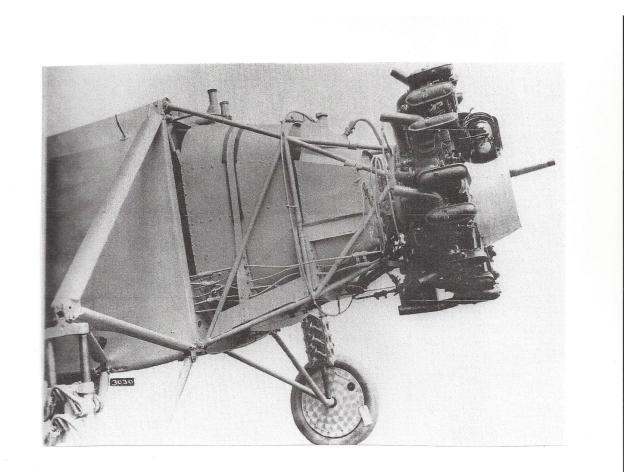
- On February 4, Ryan Aeronautical wires back. "Can build plane similar M One but larger wings capable of making flight cost about six thousand without motor and instruments delivery about three months."
- Lindbergh arrives at Ryan Aeronautical in San Diego, CA on February 25 and after conferring with company owner Benjamin F. Mahoney and engineer Donald Hall, he signed the order to build the airplane for a total cost of \$10,580.00.

The Sprit of St. Louis

- Within days of signing the contract Donald Hall had completed the drawings of the wings and fuselage structure.
- Within the week, steel tubing was cut and welded to form fuselage structure.



Fuselage Structure of the Spirit of St. Louis.



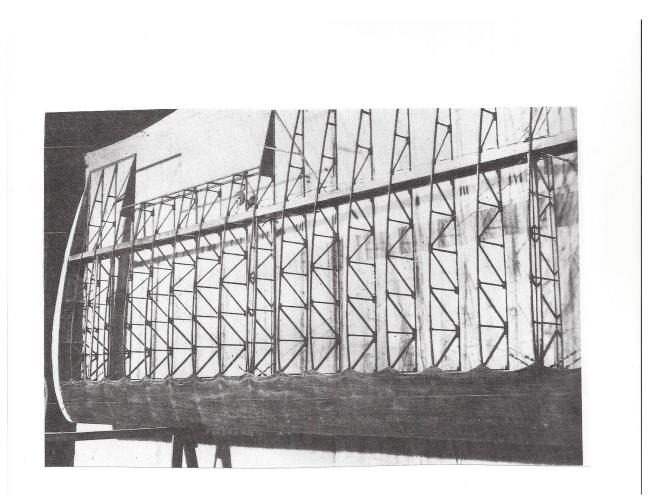
Spirit of St. Louis

Forward fuselage and engine installation.



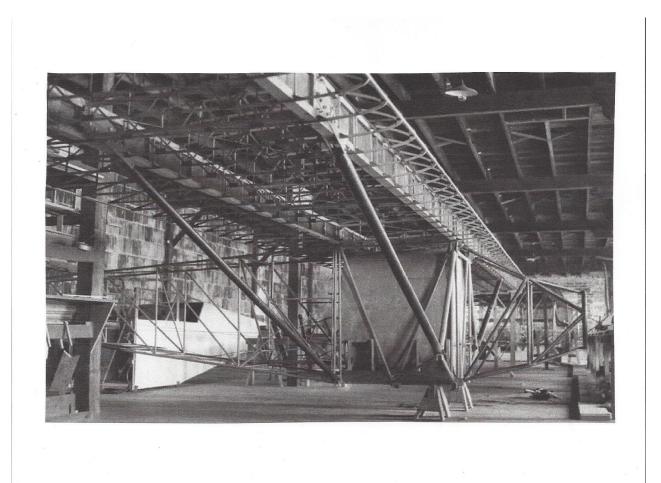
Wright J-5 Engine

A nine cylinder stationary radial, four cycle engine. Lindbergh's engine produced 220 BHP @ 2000 RPM.

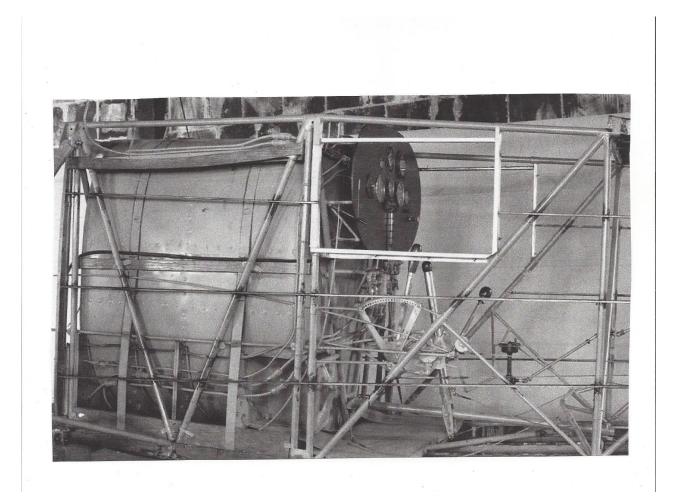


Wing Structure, Spirit of St. Louis.

A wooden structure primarily of Sitka Spruce.

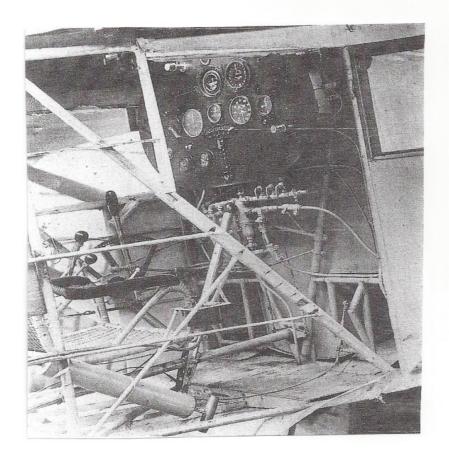


Sprit Fuselage & Wing Structure Fit UP

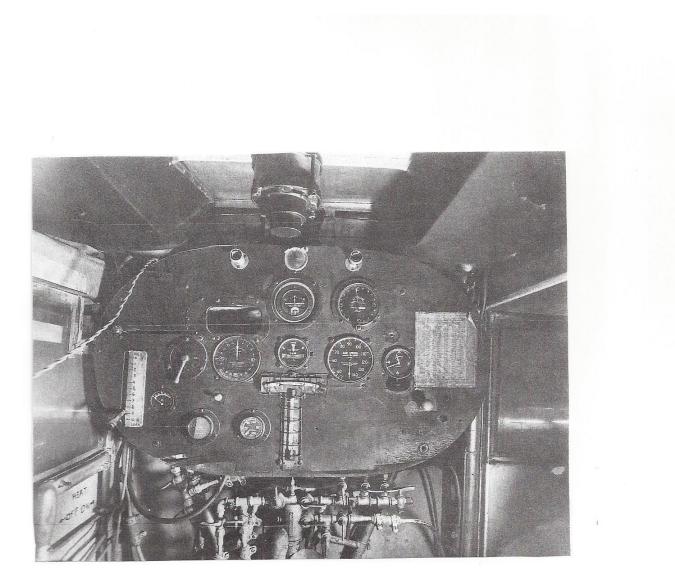


Sprit Fwd. Fuselage

200 gal. fuel tank, early instrument panel, pitch trim lever, control stick, throttle.



Spirit of St. Louis cockpit.



Spirit of St. Louis Instrument Panel.



Extracting The Sprit Wing From Workshop



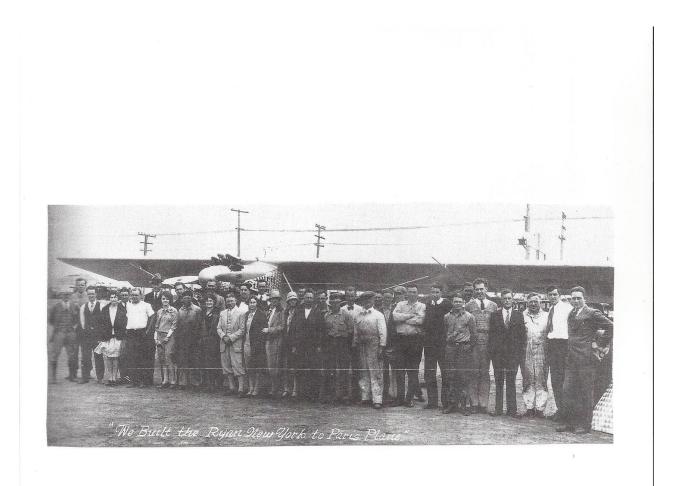
Spirit of St. Louis Wing.

The wing was built in the second story shop, lowered onto a box car, then to the ground. Person on top of box car at extreme left in dark suit is Lindbergh.



Installing the wing on the Sprit of St. Louis

Lindbergh is fourth from left. Douglas Corrigan at the tail.



The People Who Built The Spirit of St. Louis.

The person seventh from the right is Douglas (wrong way) Corrigan then a welder at Ryan Flying Company.



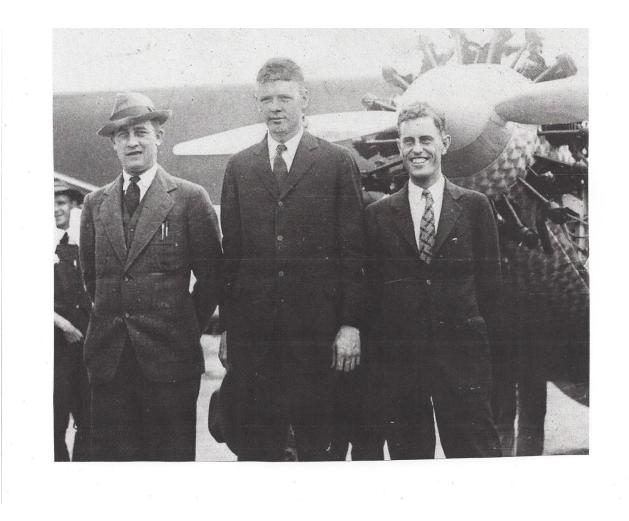
Towing To Dutch Flats For Final Assembly

Claud Ryan's Studebaker towing the Sprit.



Spirit of St. Louis at Dutch Flats Airfield, San Diego

The airplane was finished on April 25, 1927. Lindbergh spent two weeks testing the airplane and then headed East for St. Louis on May 10.



B. F. Mahoney, owner of Ryan Flying Company, Lindbergh, Donald Hall, Engineer/Designer of The Sprit of St. Louis.



Fueling the Sprit before leaving on the flight to St. Louis. May 10, 1927

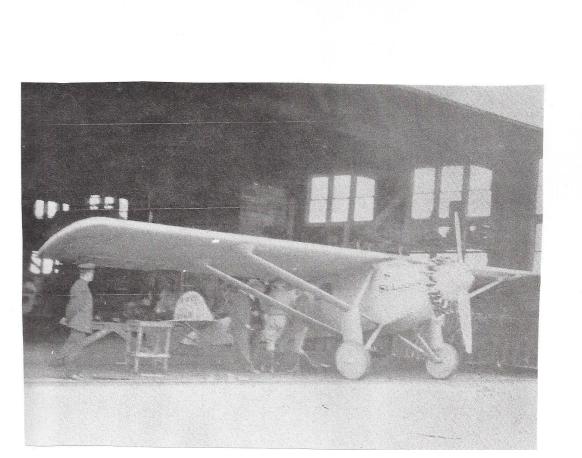


Lindbergh pictured upon arrival at St. Louis

He flew nonstop San Diego-St. Louis, 1500 miles in 14 hrs. 25 min. A record nonstop flight for that distance.

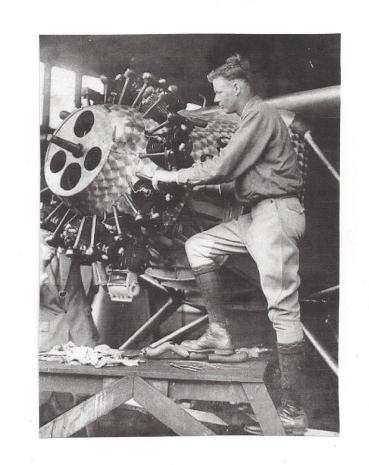
On to New York

- The very next morning after arrival, Lindbergh leaves St. Louis for New York to prepare for his flight to Paris.
- After a flight of 7 Hrs. and 22 minutes he lands at Curtiss Field.
- He had crossed the entire country in less than 22 Hrs., another record.

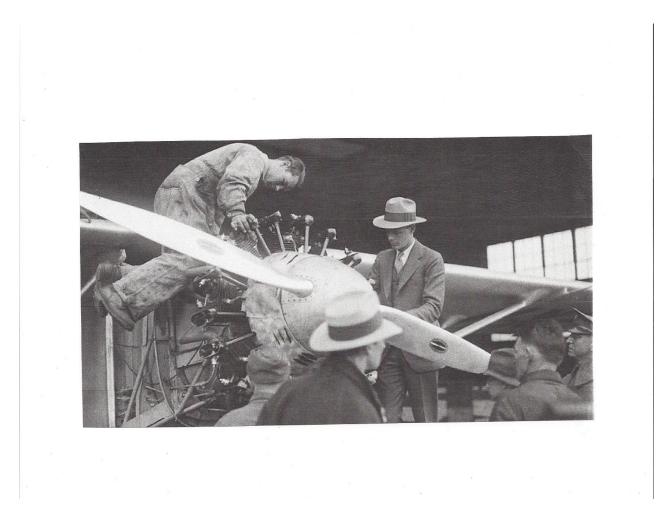


Spirit of St. Louis being checked over prior to Paris flight.

Wright Aeronautical mechanics thoroughly inspected the J-5 engine and installed a carburetor heat system.



Sprit of St. Louis Carburetor Heat Valve Installation



Wright Aeronautical mechanics inspect the J-5 engine prior to Paris flight.



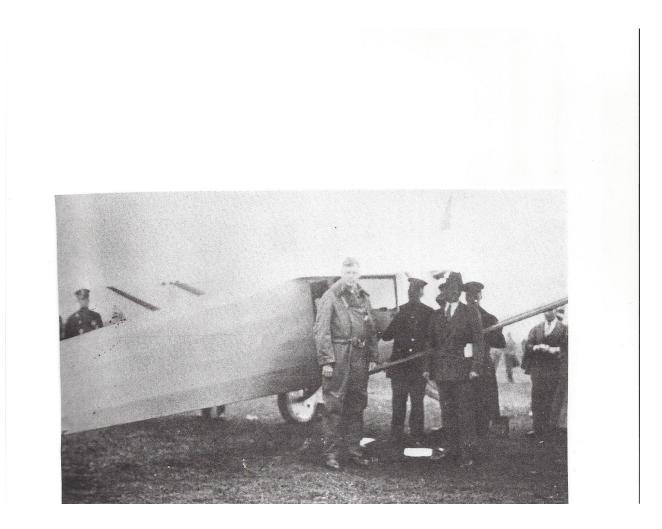
Lindbergh Takes Sprit For Test Flight May 1927



Charles & Mother Evangeline prior to NY- Paris flight.



Fueling the Sprit Before Flight to Paris



May 20, 1927 the morning Lindbergh takes off for Paris He departs Roosevelt Field, Long Island at 7:54 AM.