1903 Wright Flyer
Built by Wilbur and Orville Wright of Dayton, Ohio and flown by them on December 17, 1903 near Kitty Hawk, North Carolina. They completed four flights, the longest lasting 59 seconds and covering 852 feet (259.69 meters).

Specifications

Dimensions:
- 40 ft. 4 in. (12.29 m) overall width
- 21 ft. (6.40 m) overall length
- 8 ft. 4 in. (2.54 m) height over sweep of propellers
- 6 ft. 6 in. (1.98 m) wing chord
- 3° 25' angle of incidence
- 10 in. (0.25 m) wing anhedral (droop)

Surface Areas:
- 510 sq. ft. (48.31 m²) wing area (upper and lower)
- 48 sq. ft. (4.46 m²) elevator area (both surfaces)
- 20 sq. ft. (1.86 m²) rudder area (both surfaces)

Weights:
- 605 lbs. (274.42 kg) Total weight without pilot
- 16 lbs. (7.26 kg) fluids (water, gas, oil)
- 145 lbs. (65.77 kg) average weight of pilots

Engine:
- 4-cycle gasoline, 4 cylinders
- Aluminum-copper alloy crankcase
- 12 hp at 1020 rpm

Ignition:
- Low tension magneto, make-and-break spark

Start engine with dry batteries; switch to magneto

Lubrication:
- Internal splash-and-dash activated by crankshaft

Engine cooling:
- Thermo-siphon water through radiator

Fuel system:
- Gravity fed through rubber and steel tubing
- 0.4 gal. (1.51 l) capacity tank

Wing Loading:
- 1.47 lbs. per sq. ft. (7.18 kg per m²)
- 62.5 lbs. (28.35 kg) per engine horsepower

Propellers:
- Twin contra-rotating propellers
- Pusher configuration

Driven by roller chain, 1-in. (2.54 cm) pitch
- 8-tooth sprockets on crankshaft
- 23-tooth sprockets on propeller shafts
- 2:7/8:1 Engine to propeller rpm ratio

980 rpm approx. engine speed in flight
- 340 rpm approx. propeller speed in flight