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1903 Wright Flyer

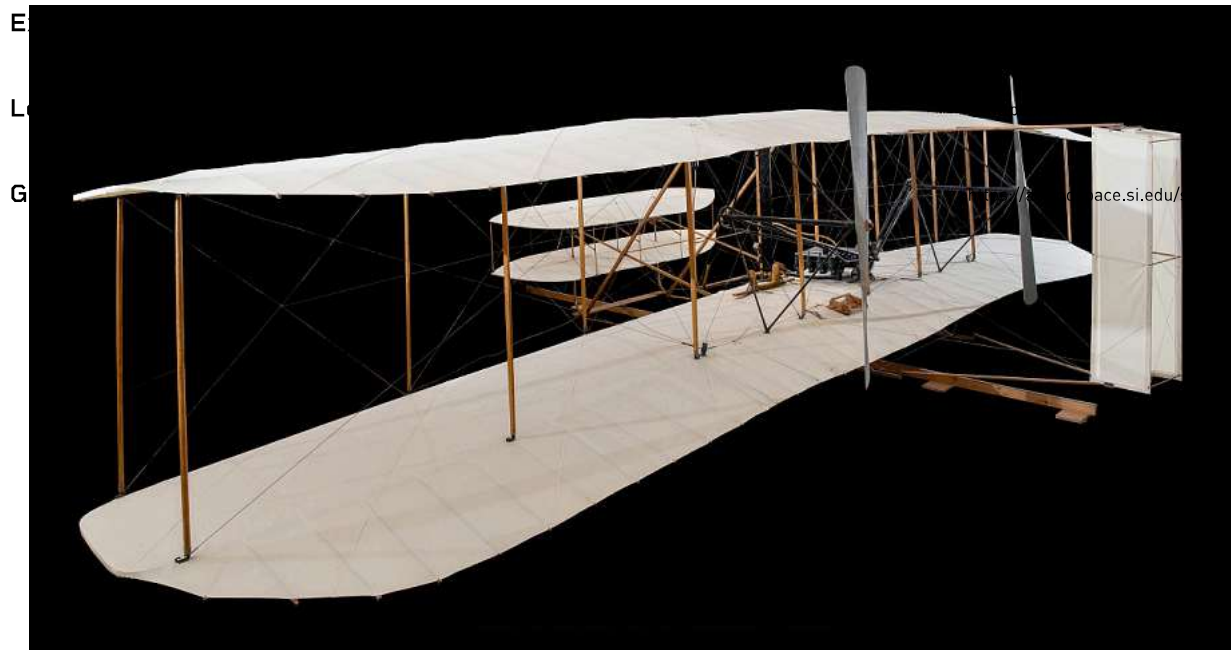
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The Wright brothers inaugurated the aerial age with the world's first successful flights of a powered heavier-than-air flying machine. The Wright Flyer was the product of a sophisticated four-year program of research and development conducted by Wilbur and Orville Wright beginning in 1899. After building and testing three full-sized gliders, the Wrights' first powered airplane flew at Kitty Hawk, North Carolina, on December 17, 1903, making a 12-second flight, traveling 36 m (120 ft), with Orville piloting. The best flight of the day, with Wilbur at the controls, covered 255.6 m (852 ft) in 59 seconds.

The Wrights pioneered many of the basic tenets and techniques of modern aeronautical engineering, such as the use of a wind tunnel and flight testing as design tools. Their seminal accomplishment encompassed not only the breakthrough first flight of an airplane, but also the equally important achievement of establishing the foundation of aeronautical engineering.

Display Status

This object is on display in Wright Brothers & The Invention of the Aerial Age <<https://airandspace.si.edu/exhibitions/wright-brothers>> at the National Air and Space Museum in Washington, DC <<https://airandspace.si.edu/visit/museum-dc>>.



Object Details

Key Accomplishment(s)

First Successful Powered Airplane with a Pilot Aboard

Brief Description

Wilbur and Orville Wright spent four years of research and development to create the first successful powered airplane, the 1903 Wright Flyer. It first flew at Kitty Hawk, North Carolina, on December 17, 1903, with Orville at the controls.

Date

1903

Country of Origin

United States of America

Type

CRAFT-Aircraft

Physical Description

Canard biplane with one 12-horsepower Wright horizontal four-cylinder engine driving two pusher propellers via sprocket-and-chain transmission system. Non-wheeled, linear skids act as landing gear. Natural fabric finish - no sealant or paint of any kind.

Dimensions

Wingspan: 12.3 m (40 ft 4 in)

Length: 6.4 m (21 ft 1 in)

Height: 2.8 m (9 ft 4 in)

Weight: Empty, 274 kg (605 lb)

Gross, 341 kg (750 lb)

Materials

Airframe: Wood

Fabric Covering: Muslin

Engine Crankcase: Aluminum

Alternate Name

1903 Wright Flyer

Inventory Number

A19610048000

Credit Line

The Estate of Orville Wright

Data Source

National Air and Space Museum

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Deep dive

The Wright Brothers

<<https://airandspace.si.edu/explore/stories/wright-brothers>>

📅 June 02, 2022

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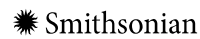
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