Smithsonian
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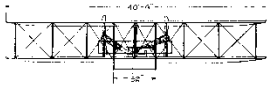

WRIGHT BROTHERS 1903 FLYER DRAWINGS

National Air and Space Museum Drawings

The Wright Brother's 1903 Flyer holds a special place in aviation history as the vehicle in which mankind first achieved controlled, powered, and sustained flight. Aviation historians, enthusiasts, and modelers continue to have a fascination with this particular aircraft over others developed and flown since 1903. The Wrights made no drawings of the aircraft when they originally built it and they continuously modified the craft during flight tests in Dayton, Ohio, and Kitty Hawk, North Carolina. Since the 1903 Flyer was heavily damaged following its last flight in 1903 and by a flood in Dayton in 1913 and was reconstructed in 1916 and 1925-27, there will always be some doubt about the exact configuration of the aircraft during the 1903 flights. Drawings of the airplane were made by the Science Museum of London and by Louis Christman; these drawings were made based on the airplane as it was then displayed. During the National Air and Space Museum's 1985 restoration of the Wright 1903 Flyer the restoration team completely disassembled the aircraft and measured each component. The Museum created a new set of drawings based on this work for both the aircraft (drawings complete in 1986) and engine (drawings complete in 1990) as they existed in 1985.

NATIONAL AIR AND SPACE MUSEUM DRAWINGS (1986, 1990)

The *NASM Drawings* consist of a set of 50 drawings detailing the airframe and engine of the Wright 1903 Flyer as it existed in 1985. Titles and drawing numbers for the set are listed on the reverse of this form. The *NASM Drawings* are available as a **complete set of fifty 24" x 36" prints**, or as individual 24" x 36" prints. Individual drawings orders are custom printed; because of the large number of requests we receive and the limited number of staff available to fill these orders, you may request *no more than 25 drawings per individual drawing order*. To order individual drawings, mark the selected drawings on the reverse.

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WRIGHT BROTHERS 1903 FLYER DRAWINGS

National Air and Space Museum Drawings

#	Code	Description
	A1	*Three View Drawing*
	B1	Lower Center Wing Structure
	B2	Upper Center Wing Structure
	B3	Right Wing Structure, Upper and Lower, Outer
	B4	Left Wing Structure, Upper and Lower, Outer
	B5	Wing Ribs, Center and Outer Wings
	B6	Engine Support Bearers, Lower Center Wing
	B7	Pilot Support Bearers, Lower Center Wing
	B8	Wing Struts, Strut Fittings, Wing Hinge Plates
	B9	Wing Coverings, All Wing Structures
	B10	Wing Trussing, Truss Wire Diagram
	C1	Drawing Index – Engine
	C2	Engine Assembly and Installation, Left Side Elevation
	C3	Engine Assembly and Installation, Front and Rear Elevations
	C4	Engine Assembly and Installation, Plan View
	C5	Engine Details; Crankcase
	C6	Engine Details; Crankshaft, Flywheel, Pistons, Drive Sprockets, Connecting Rods
	C7	Engine Details; Valve Housing; Valves and Ignition
	C8	Engine Details; Exhaust and Ignition Camshafts
	C9	Engine Details; Crankcase Cover, Fuel Line, Intake Manifold
	C10	Low Tension Magneto
	C11	Water Cooling Radiator and Hose Connections
	C12	Fuel Tank, Fuel Control Valves, Engine Control Lever
	C13	Miscellaneous Details
	C14	Miscellaneous Details

#	Code	Description
	D1	Skid Structure Assembly and Details
	D2	Detail Structural Views & Fittings - Right Side
	D3	Detail Structural Views & Fittings - Left Side
	D4	Landing Skid, Cross Ties & Fittings
	E1	Front Rudder Outrigger Assembly
	E2	Outrigger Sub-Assembly and Details
	E3	Outrigger Struts, Cross Tie, and Fittings
	E4	Front Rudder Covering and Installation
	E5	Front Rudder Structure and Mounting
	E6	Control Shaft Assembly and Details
	E7	Operating Control Shaft Assembly and Details
	F1	Rear Rudder Assembly and Installation
	F2	Rear Rudder Structure and Fitting
	F3	Rear Rudder Upper and Lower Outrigger Struts
	G	First Flights Propeller (NASM revision 01/06/87)
	G1	Propellers and Drive Chains Installation
	G2	Propellers and Propeller Drive Shafts
	G3	Shaft Sprockets, Chains, and Right Side Chain Guide
	G4	Left Side Chain Guide Casing
	G5	Propeller Shaft Bearing Housing and Strut Assemblies
	H1	Wing Warping and Rear Rudder Control Assembly
	H2	Control Wire and Fitting Details
	H3	Pilot's Control and Operating Cradle and Footrest
	J1	Instruments and Mounting Details
	K1	Monorail Track and Carrier Dolly

Individual prints are $6.00 each plus shipping.

ADDITIONAL WRIGHT 1903 FLYER DRAWINGS SETS AVAILABLE: In addition to the *National Air and Space Museum Drawings* (1986, 1990), the collections of the National Air and Space Museum Archives contain three other sets of drawings of the 1903 Flyer and its components, executed at various times during the life of the aircraft: *Science Museum of London Drawings* (1928, 1938), *Ford Drawings* (1939), and *Christman Drawings* (1950). Additional information on these sets is available upon request.