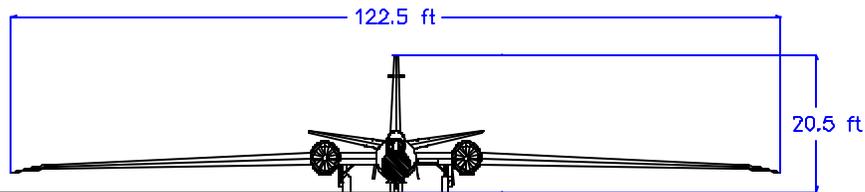
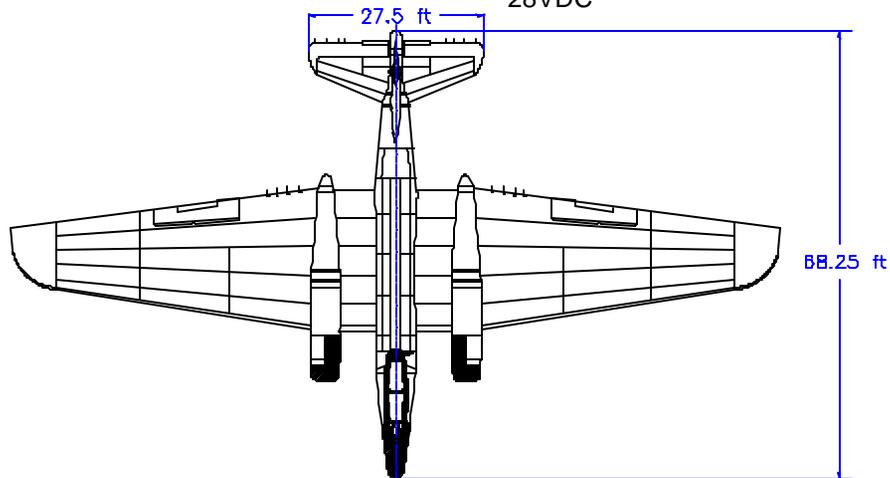


## Performance and Capabilities

Aircraft Ceiling:	Well in Excess of 60,000 ft.
Maximum Flight Duration:	Approximately 6.5 hours
Range:	Approximately 2,500 miles
Max Gross Weight:	63,000 pounds
Maximum Payload Weight:	6,000 pounds
Wing Surface Area:	2,000 square feet
Engine Thrust:	15,500 pounds per TF-33 engine
True Air Speed at 60,000+ feet:	~410 knots (Max Mach .8)
Max. True Air Speed at Sea Level:	190 knots
Minimum Runway Dimensions:	7000 ft. x 150 ft. (sea level)
Maximum Crosswind Component:	15 Knots
Air to Ground Communications:	UHF, VHF, HF, & SAT Phone
Payload Power Options:	110V 400Hz 3 Phase 110V 60Hz Single Phase 28VDC



For additional information, contact:

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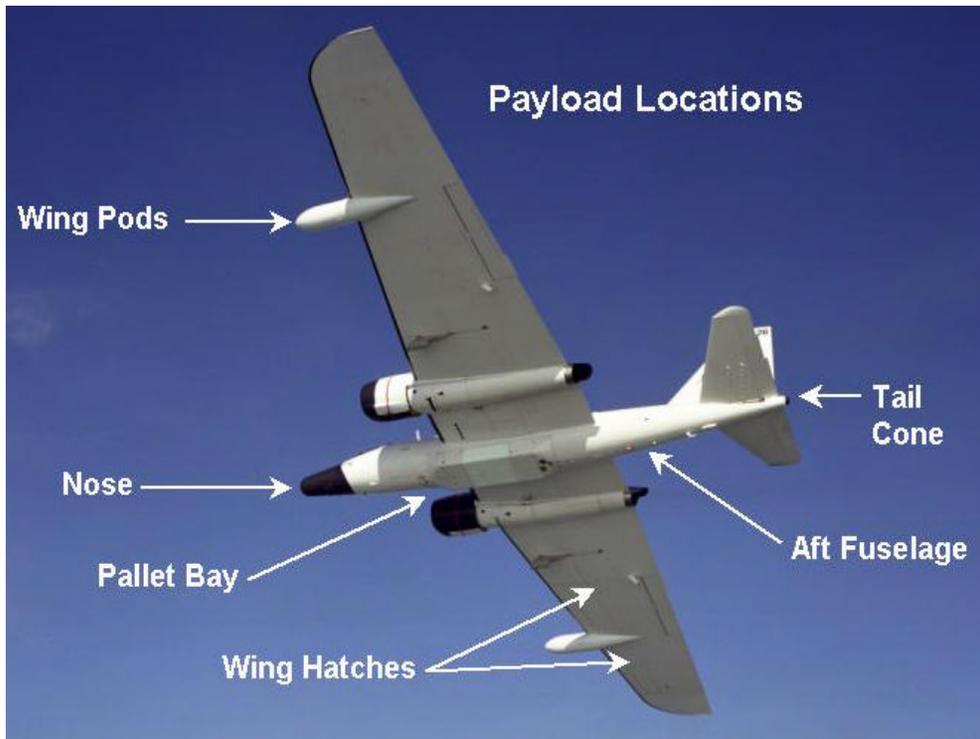
# WB-57

## High Altitude Research Aircraft



## Program Overview

NASA Johnson Space Center (JSC) operates two WB-57 aircraft out of Ellington Field in Houston, Texas. The WB-57 is a mid-wing, long-range aircraft capable of operation for extended periods of time from sea level to altitudes well in excess of 60,000 feet. Two crewmembers are positioned at separate tandem stations in the forward section of the fuselage. The pilot station contains all the essential equipment for flying the aircraft while the sensor operator station contains both navigational equipment and controls for the operation of the payloads that are located throughout the aircraft. The WB-57 can fly for approximately 6.5 hours and has a range of approximately 2500 miles.



## Payload Integration Locations

The WB-57 aircraft can carry up to 6000 lbs. of payload. Typical payload integration locations are detailed above. The WB-57 employs a pallet system in the main fuselage area. The pallet system consists of interchangeable pallet modules. Pressurized and unpressurized pallets are available. The pallet system will carry a total of 4000 lbs. including pallet weight. Lighter payloads can also be carried in the aft fuselage, tail cone, wing pods, wing hatches, and/or the nose cone.



The NOAA PALMS (Particle Analysis by Laser Mass Spectrometry) instrument in the nose cone.

The University of Colorado CORE (Chlorine Oxides in Rocket Exhaust) instrument in a three-foot unpressurized pallet.



The Harvard University Water Vapor Instrument in the left wing pod.

Below: The crew members of the WB-57.

