



F-35B – The World’s First Supersonic STOVL Stealth Aircraft



LOCKHEED MARTIN
We never forget who we're working for®



Redefining the Multirole Fighter

The 5th generation F-35 Lightning II integrates advanced stealth technology into a highly agile, supersonic aircraft that provides the pilot with unprecedented situational awareness and unmatched lethality and survivability. As new threats emerge, it is more important than ever for U.S. and allied fighter fleets to fly the F-35 stealth fighter, the world’s only 5th generation international aircraft. While each aircraft is uniquely designed to operate from different environments, all three variants set new standards in network-enabled mission systems, sensor fusion and supportability. The F-35 redefines the multirole fighter.

The World’s Only Supersonic STOVL Stealth Aircraft

For the first time in aviation history, supersonic, radar-evading stealth comes with short takeoff/vertical landing (STOVL) capability. The F-35B has unequalled basing flexibility and advanced network-enabled mission systems that provide unprecedented multimission capability across the spectrum of operations and is an essential enabler for other forces in the battlespace. The F-35B redefines the multirole fighter.

Ground, Air or Sea – The F-35B Delivers

Increasingly, modern security challenges require wider distribution of forces and capabilities across

a range of scenarios. STOVL capability gives the F-35B the unique capability to operate from a variety of ships, roads and austere bases near frontline combat zones, greatly enhancing sortie generation rates. The unmatched basing of the F-35B – ashore and afloat – provides more employment flexibility in any scenario.

Shaft-Driven LiftFan®

STOVL operation is made possible through the patented shaft-driven LiftFan® propulsion system. This propulsion approach overcomes many of the temperature, velocity and power challenges of direct-lift systems.



Reduced Operation and Support Costs

The F-35B establishes new levels of operational readiness. With simplicity and ease of maintenance designed-in, the aircraft brings unmatched reliability and maintainability, along with a reduced deployment footprint. Support equipment requirements have been reduced, and logistics are streamlined and automated. The F-35B will provide unequalled multimission capability with a fraction of the support required by legacy fighters.



F-35B STOVL

Length	51.2 ft / 15.6 m
Speed	Mach 1.6
Wingspan	35 ft / 10.7 m
Wing area	460 ft ² / 42.7 m ²
Combat radius (internal fuel)	>450 n.mi / 833 km
Range (internal fuel)	>900 n.mi / 1,667 km
Internal fuel capacity	13,500 lb / 6,125 kg
Max g-rating	7.0
Weapons payload	15,000 lb / 6,800 kg
Propulsion	F135-PW-600
Thrust*	38,000 lb Max / 26,000 lb Mil / 40,500 lb Vertical

*Maximum Power (Max) = with afterburner; Military Power (Mil) = without afterburner; Vertical = without afterburner