



F-35B

THE WORLD'S FIRST SUPERSONIC STOVL AIRCRAFT

**LOCKHEED MARTIN**

*We never forget who we're working for®*



# F-35B – THE WORLD’S FIRST SUPERSONIC STOVL AIRCRAFT

## 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 unequaled 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.

## F-35 Enterprise Sustainment

Lockheed Martin and key suppliers strive to provide affordable, world-class F-35 sustainment. It is flexible, tailored and compatible to meet the needs of all current and former customers. The key sustainment tenets encompass and align the entire F-35 air system, including:

- Air vehicle training
- Autonomic Logistics Information System
- Test equipment
- Support equipment



## F-35B

Length	51.2 ft / 15.6 m
Speed	Mach 1.6
Wingspan	35 ft / 10.7 m
Wing area	460 ft <sup>2</sup> / 42.7 m <sup>2</sup>
Combat radius (internal fuel)	>450 n.mi / 833 km
Range (internal fuel)	>900 n.mi / 1,667 km
Internal fuel capacity	13,100 lb / 5,942 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