F-35B

The World's Most Advanced Fighter

LOCKHEED MARTIN

F-35B: The World's First Supersonic STOVL Aircraft

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BRINGING UNMATCHED AIR POWER

The most advanced node in a 21st Century Security network-centric architecture, the F-35 serves as a powerful force multiplier with advanced sensors and communications suites. Its 5th Generation capabilities make the F-35 the most survivable and connected fighter aircraft in the world, giving pilots an advantage against any adversary and enabling them to execute their mission and come home safely.

As threats advance and legacy aircraft age, the F-35 is critical to maintaining air dominance now and in the future.

THE WORLD'S ONLY SUPERSONIC STOVL STEALTH AIRCRAFT

The F-35B is the first-ever supersonic, radar-evading stealth aircraft with short takeoff/vertical landing (STOVL) capability, giving it the unique capability to operate from a variety of ships, roads and austere bases near frontline combat zones.

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

STRENGTHENING GLOBAL SECURITY

The F-35B is operated by the United States Marine Corps, the United Kingdom Royal Air Force and the Italian Air Force. The growing community of F-35 nations enhances shared global deterrence through interoperability and collaboration.

The program's global growth ensures we have aircraft around the world to defend and deter. By 2030, there will be more than 550 F-35s in Europe. By 2025, there will be more than 300 F-35s in the Indo-Pacific region.

F-35B

Length	51.2 ft/15.6 m
Speed	Mach 1.6
Wingspan	35 ft/10.7 m
Wing Area	460 ft²/42.7 m²
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

MODERNIZING TO MAINTAIN THE ADVANTAGE

Block 4 upgrades provide the most significant evolution of capabilities to date for the F-35, including increased missile-carriage capacity, added advanced non-kinetic electronic warfare capabilities and improved target recognition.

Tech Refresh-3 (TR-3) is a mission systems upgrade that introduces open mission systems architecture and includes a new integrated core processor with greater computing power, an enhanced panoramic cockpit display, a larger memory unit and other classified capabilities.

DELIVERING SUSTAINMENT CAPABILITIES AND COST-EFFECTIVE PERFORMANCE

Lockheed Martin works across the life cycle, applying cutting-edge technology, data analytics, aggregate demand and business processes innovation to deliver cost-competitive, unparalleled 5th Generation F-35 capabilities. Sustainment solutions to support mission readiness across the F-35 fleet are flexible, tailored to meet customer needs and may include:

- Pilot and maintainer training
- Base and flight line operations
- Regional warehouses
- Repair and upgrade facilities
- 24/7 sustainment services
- Supply chain management
- Test and support equipment
- Autonomic Logistics Information System (ALIS)

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