

F-35 vs. Legacy Fighters

According to a 2010 capabilities study by Lockheed Martin, the F-35 is:

- **6x more effective in air-to-air missions**
 - Maneuverability, Aerodynamics, Range, and Acceleration capabilities are comparable or greater than Advanced 4th Gen Fighters in combat configurations. This Aerodynamic performance and unmatched sensor suite result in >6 times Loss Exchange Ratio in an Air-to-Air scenario with an advanced threat.
- **8x more effective in air-to-ground missions**
 - The combination of stealth, sensors, situational awareness (fused data), range, and payload to Find, Fix, Target, Track, Engage, and Assess ground targets provides 8 times more effectiveness than Advanced 4th Gen fighters in an advanced threat environment.
- **6x more effective in surveillance missions**
 - F-35 ISR capabilities penetrate farther into enemy integrated air defense systems (IADS) due to VLO stealth and advanced sensors, which enables >6 times relative track depth over a typical standoff asset operating at medium altitude.