

# Report highlights F-35 problems

The U.S. and allies buying F-35 multi-role fighter jets could face added costs as problems emerge during long-delayed combat simulation tests, according to the U.S. Government Accountability Office

**F-35 Lightning II:** Built in three versions with maximum speed of **Mach 1.6** (1,975km/h)

**F-35A:** Conventional takeoff and landing (CTOL) variant

**F-35B:** Short takeoff and vertical landing (STOVL)

**F-35C:** Carrier version (CV) with tailhook for navy use



**1 Cockpit:** Spikes in pressure regulation can cause *barotrauma* – severe ear and sinus pain

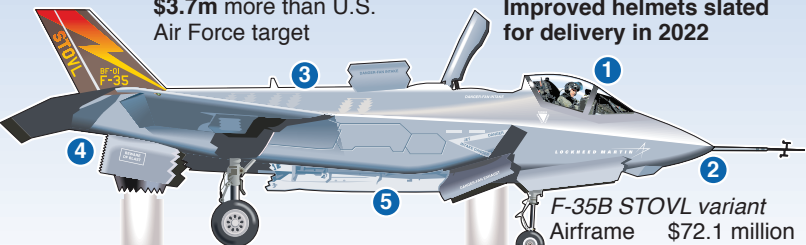
**3 Supersonic flight:** Stealth coating, which makes jet invisible to radar, can bubble and detach when flying in excess of Mach 1.2

**5 Costs:** Every hour of flight costs **\$36,000** on average – **\$7.8m** per plane for one year of operation – **\$3.7m** more than U.S. Air Force target

**2 Radar:** Sea search mode only illuminates small slice of ocean surface

**4 Engine:** Afterburner – which injects fuel directly into tailpipe to boost speed – also damages stealth coating on horizontal tail surface

**6 Electronic combat system:** Occasional green glow on helmet-mounted display washes out data. **Improved helmets slated for delivery in 2022**



**F-35B STOVL variant**  
 Airframe \$72.1 million  
 Engine \$26.3 million  
 Unit cost **\$98.4 million**



## International orders (aircraft)

U.S.	2,456	Israel	50
Japan	147	Netherlands	46
UK	138	Switzerland	36
Australia	100	Belgium	34
Italy	90	Poland	32
Finland	64	Denmark	27
South Korea	60	Singapore	4
Norway	52	<b>Total</b>	<b>3,336</b>