

Staying Relevant: Major Modifications to Fourth-Gen Fighters

Premature termination of the F-22, delays with the F-35, and long-standing anemic investment means USAF will have to depend on fourth-generation aircraft for years to come. To make that feasible, the Air Force is investing heavily in new capabilities.

Aircraft



A-10C Thunderbolt

Modifications

- **A-10 Thunderbolt Advanced-Wing Continuation Kit (ATTACK):** Re-winging to extend service life and improve safety and maintenance
- **Service Life Extension Program (SLEP):** Structural modifications to prolong service to 2032 or beyond
- **Lightweight Airborne Recovery System (LARS):** Improves speed of location and recovery of downed airmen
- **GPS Anti-Jam capability:** Replaces unprotected GPS antennas
- **Other Projects:** New Identification, Friend, or Foe system; new oxygen system; improved displays; secure radios

Cost (FY18-23)

\$2.9 billion



F-15C/D/E Eagle

- **Eagle Passive/Active Warning Survivability System (EPAWSS):** Improves survivability through autonomous threat detection/jamming, management of countermeasures, and electro-optical defenses; geolocation of enemy emitters, classified functions
- **Active electronically scanned array (AESA) radars:** Provides longer-range detection, tracking, targeting and mapping; adds electronic warfare capabilities; improves performance and maintainability
- **Infrared Search and Track (IRST):** Permits detection of stealth targets through infrared signatures
- **Other projects:** New processor, new radios/data links, structural enhancements to recapture speed and load performance

\$7.6 billion



F-16 Falcon

- **AESA radars:** Provides longer-range detection, tracking, targeting, and mapping; adds electronic warfare capabilities; improves performance and maintainability
- **SLEP:** Adds up to 8,000 hours of service life
- **Ground Collision Avoidance System (GCAS):** Automatically recovers aircraft from imminent collision with terrain
- **New Weapons:** Adds ability to carry and launch the B61-12 tactical nuclear weapon and precision weapons designed for low collateral damage
- **Other Projects:** New radios, data links, and digital radar warning receiver

\$5.4 billion