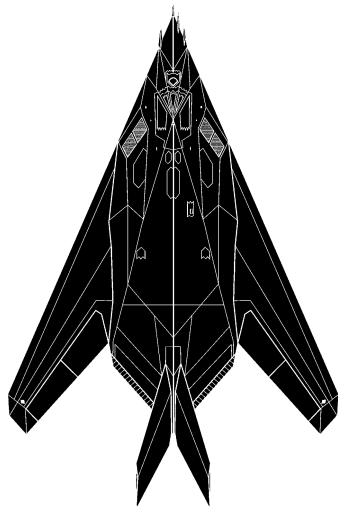


## F-117 Nighthawk



The F-117A Nighthawk, the world's first operational stealth combat aircraft, was one of history's best-kept military secrets. Lockheed's single-seat, twin-engine ground-attack fighter was conceived in 1975, first flew in 1981, and became operational in 1983, but it was not made public until 1988. Developed to meet a USAF need to attack high-value targets without being detected by enemy radar, "the Black Jet" became world famous for its work in the 1991 Gulf War.

The F-117 was of conventional aluminum construction, with a specially designed canopy and precisely serrated edges on doors and panels. It achieved stealth principally by deflecting radar returns and using radar-absorbent material, but the design also suppressed infrared signals from its engines and exhausts. It was painted black and

flew only at night. F-117 designers relied heavily on stock parts, and its development phase was especially short. The first YF-117A, serial #79-0780, made its maiden flight only 31 months after the full-scale development decision.

The F-117 was not "invisible" to radar, and could be detected, but it was extremely difficult to track. In fact, some believe the Iraqis never successfully tracked it in 1991. The F-117 performed brilliantly in Desert Storm, flying unseen and untouched through the fire-hose shower of Iraqi anti-aircraft fire in the war's early days, although one was shot down during Operation Allied Force in 1999.

It was retired in 2008, not for loss of capability but mostly because of cost.

—Walter J. Boyne

**This aircraft:** USAF F-117 Nighthawk—#85-0825—as it looked in 1991 when assigned to the 415th Tactical Fighter Squadron, based at Tonopah Test Range Arpt., Nev.



### In Brief

Designed, built by Lockheed ★ first flight June 18, 1981 ★ number built 64 [five demonstrators] ★ crew of one ★ two General Electric F404 engines. **Specific to F-117A:** armament none ★ load up to 5,000 lb of a variety of munitions (Mk 84, GBU-10, GBU-12, GBU-27, GBU-31, BLU-109, WCMD, AGM-154 JSOW, AGM-158) ★ max speed 617 mph ★ cruise speed 550 mph ★ max range 930 mi ★ weight (loaded) 52,500 lb ★ span 43 ft 4 in ★ length 65 ft 11 in ★ height 12 ft 5 in.

### Famous Fliers

**Notables:** James Allen, Bruce Carlson, Howell Estes III, Greg Feest, Ralph Getchell, Ward Juedeman, Bryan Knight, Bill Lake, Kenneth Levens, Chuck Link, Roger Locher, John Mills, Ross Mulhare, Lloyd Newton, Michael Short, Michael Stewart, A. J. Tolin, Alton Whitley, Dale Zelko. **Test pilots:** Harold Farley, Dave Ferguson, Skip Holm, Tom Morgenfeld.

### Interesting Facts

Exhibited radar cross section of only .269 sq ft ★ stemmed from faceted-panel stealth theory concept of Pyotr Ufimtsev, a Soviet mathematician ★ carried no radar of its own ★ given call sign "Bandit," leading F-117 pilots to call themselves "Bandits" ★ flown by 558 pilots, each with his own "Bandit" number ★ saw first combat in 1989 in Operation Just Cause, Panama ★ in Gulf War, flew 1,271 sorties, dropped 2,000 tons of bombs, and struck 1,669 targets ★ shot down only once, over Yugoslavia on March 27, 1999 ★ nicknamed "Black Jet" by USAF pilots and "Shaba" (Arabic for "ghost") by Saudi airmen ★ featured in films "Interceptor" (1993), "Executive Decision" (1996).

Photo by SrA. Mitch Fuqua



An F-117 Nighthawk stealth fighter touches down at Aviano AB, Italy, Feb. 21, 1999.