

Predator



Predator, a remotely piloted aircraft, became world famous as the first successful weaponized RPA and first to conduct lethal strikes. Designed by General Atomics Aeronautical Systems, this medium-altitude, long-endurance system was first used by USAF for surveillance. Later it was armed with laser guided missiles and flown against terrorist targets. Many lethal missions were CIA ventures, but the aircraft, pilots, and command and control systems belonged to the Air Force.

Predator descended from RPAs conceived in the 1980s by designer Abraham Karem. Predator was made of light graphite epoxy composites and given long wings, downward tail planes, and a large head bulge. Powerful EO/IR cameras and sensors yielded full-motion video and still radar images. It saw first combat—in a reconnaissance

role—over Bosnia in 1995. By 2000, improved communications let US-based pilots operate Predators 7,000 miles away. This led to “remote split operations”—a forward deployed team for takeoff and landing and a US-based crew to fly the mission.

Gen. John Jumper, commander of Air Combat Command, pushed USAF to add two Hellfire missiles to strike fleeting targets. In September 2000, an unarmed Predator likely located Osama bin Laden in Afghanistan. On Oct. 7, 2001, Predator fired its first missile in combat, in Afghanistan. The Predator’s Air Force designation then changed in 2002 from RQ-1 to MQ-1, denoting new multimission capabilities. It then went into continuous operation, orbiting over numerous war zones.

—Robert S. Dudley with Walter J. Boyne

This aircraft: USAF MQ-1B Predator—#00-3015—as it appeared in April 2012 when assigned to 15th Reconnaissance Squadron, 432rd Wing, Creech AFB, Nev.



USAF photo by SMSgt. Paul Holcomb

An MQ-1B flies over Creech AFB, Nev., in 2013.

In Brief

Designed, built by General Atomics Aeronautical Systems ★ first flight July 3, 1994 ★ number built 304 (USAF 268; Army 22; Navy three; Italy nine; GA two) ★ crew of zero onboard, two remote (pilot, sensor/weapon system operator) ★ one Rotax 914 turbo-charged piston engine driving one prop ★ defensive armament typically none ★ weight (max T/O) 2,250 lb ★ max speed 138 mph ★ cruise speed 84 mph ★ service ceiling 25,000 ft. **Specific to MQ-1B:** main function armed reconnaissance ★ offensive armament two AGM-114 Hellfire or six AGM-176 Griffin missiles ★ payload 450 lb ★ range 770 mi ★ endurance 40 hr ★ span 55 ft ★ length 27 ft ★ height seven ft.

Famous Fliers

Air Force Notables: Scott Swanson (first combat air strike, Chis Chambliss (ex-Thunderbirds pilot, first RPA wing commander), William Tart. **Enlisted Sensor/Weapon Operators:** Jeff Guay, Brandon Bryant. **First Beta Pilot Class:** Jeremy Fortier, William Freemantle, Chris Gesch, Rob McGowan, Steven Petrizzo, Jack Rhodes, Timothy Rott, Michawn Yuvienco. **Test Pilot:** Tim Just (first flight).

Interesting Facts

Named by Smithsonian’s *Air & Space Magazine* as one of 10 “aircraft that changed the world” ★ seen combat over Afghanistan, Pakistan, Bosnia, Serbia, Iraq, Yemen, Libya, Syria, Somalia ★ powered by a four-cylinder Austrian engine used in snowmobiles and ultralight sport aircraft ★ featured in films “Syriana,” “The Bourne Legacy,” “Good Kill” ★ first unmanned aerial vehicle in air-to-air combat with a manned aircraft (December 2002 over Iraq) ★ can be disassembled and loaded into

a travel container nicknamed “the coffin” ★ can operate on a 75-foot-wide hard-surface runway ★ used to monitor wind direction and other characteristics of large US forest fires ★ once staged a flight lasting for 40 hours, 5 minutes ★ has accumulated well more than 2 million flight hours with a fleet fully mission capable rate of 90 percent ★ helped rescue encircled US combat team in 2002 Battle of Roberts Ridge in Afghanistan ★ in 2011, used to kill Anwar al-Awlaki, an American-citizen cleric and al Qaeda leader.



Illustration by Zaur Eylanbekov