



FACT SHEET

U.S. Air Force Fact Sheet

LTV A-7D

Mission and Description (December 1986)

The principal mission of the A-7D aircraft is the destruction of ground targets in support of ground forces. The A-7D is a single place transonic aircraft and has an all-weather combat capability.

The A-7D has fixed wing incidence and a high-lift system composed of leading edge flaps and single slotted trailing edge flaps.

Primary flight control is provided by outer panel ailerons, spoiler deflectors on the center section, unit horizontal tail and a rudder. A dual channel, three-axis, stick-steering autopilot is provided.

The fuel system incorporates both in-flight and single-point ground refueling capabilities. A Head-Up Display (HUD) system is provided to put all steering and attack displays between the pilot's eyes and the windshield.

A Navigation/Weapon Delivery system integrates many of the aircraft's avionic subsystems to provide for navigation to the target, computed run on target, computed weapon release, and return navigation.

There are two fuselage and six wing pylon store stations. A KB-18A strike camera system is located in the forward section of the engine compartment.

A-7D in Combat

The A-7D began to arrive at Korat Royal Thai Air Force Base, Thailand, during the late summer of 1972. By the end of October, the A-7D had taken over the combat close air support (Sandy) mission from the [Douglas A-1E Skyraider](#). The A-7D was also used during the closing months of the war as an escort on [gunship missions](#) and as a tactical bomber during the [Linebacker II campaign](#). The development of the Head-Up Display (HUD) allowed the pilot to view all steering and attack information on a small display mounted above the main instrument panel between the windshield and the pilot's line of sight.

The A-7D was delivered in significant numbers to the Air National Guard -- many new from the factory. The ANG continued to improve the A-7D throughout the 1970s. One significant upgrade was the addition of the Pave Penny seeker system for detecting laser marked targets. The Pave Penny pod was mounted just below the engine air intake. The Pave Penny system was so successful it was incorporated in the [A-10](#) design. Another improvement done by the ANG was the addition of advanced maneuvering flaps to increase the agility of the aircraft at low levels, especially during attack runs.



LTV A-7D (S/N 68-8224, the 10th A-7D built) at Eglin Air Force Base, Fla. Note the Navy-style refuel probe just behind the nose below the cockpit. (U.S. Air Force photo)

The National Museum of the United States Air Force has an [A-7D](#) on display. This aircraft was flown on Nov. 18, 1972, by Maj. Colin A. Clarke on a nine-hour rescue support mission in Southeast Asia for which he was awarded the Air Force Cross, the Air Force's second highest award for valor in combat.

Type	Number built/ converted	Remarks
YA-7D	5	USAF update of A7-A
A-7D	454	Production aircraft

TECHNICAL NOTES:

Armament: One M61A1 20mm cannon and up to 15,000 lbs. of mixed ordnance (bombs, rockets, missiles and dispensers) and/or fuel tanks on eight external stations

Engine: Allison TF41-A-1 turbofan (license built Rolls Royce RB162-256 Spey) of 14,250 lbs. thrust at military power

Maximum speed: 574 knots at 7,000 ft., military power

Combat speed: 568 knots at sea level, military power

Combat radius: 503 nautical miles with 6,560 lbs. payload at 440 knots average in 2.66 hours

Range: 2,672 nautical miles with 2,672 gallons of fuel at 471 knots average in 5.7 hours at 39,385 lbs. takeoff weight

Service ceiling: 37,200 ft. (500 fpm, combat weight, military power)

Span: 38.7 ft. (23.8 ft. with wings folded)

Length: 46.1 ft.

Height: 16.1 ft.

Tread: 9.5 ft.

Weight: 42,000 lbs. maximum takeoff

Crew: One

Serial numbers: The first five aircraft built were used as service test aircraft and designated YA-7D or A-7D-1-CV: 67-14582 to 67-14586; A-7D: 68-8220 to 68-8231; 69-6188 to 69-6244; 70-0929 to 70-1056; 71-292 to 71-379; 72-169 to 72-265; 73-0992 to 73-1015; 74-1737 to 74-1760; 75-386 to 75-409

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