## Ling-Temco-Vought A-7 "Corsair" II

The Hickory Aviation Museum's A-7A Bureau Number 154345 is on loan from the National Museum of Naval Aviation. It arrived in Mar of 2009. We have a number of local pilots that flew the A7. Coordinated by Kyle & Kraig Kirby.



Role	Attack Aircraft
National origin	United States of America
Manufacturer	Ling-Temco-Vought
First flight	26 September 1965
Introduction	February 1967
Retired	1991 (USAF, USN); 1993 (ANG) 1999 (Portuguese Air Force) 2014 (Hellenic Air Force)
Status	Retired
Primary users	United States Navy United States Air Force Portuguese & Hellenic Air Forces
Produced	1965–1984

1569

Pratt & Whitney TF30-P-6; later Allison TF41-A-2 turbofan.

US\$2.86 million (1998)

In 1962, the United States Navy began preliminary work on VAX (Heavier-than-air, Attack, Experimental), a replacement for the A-4 Skyhawk with greater range and payload. Particular emphasis was placed on accurate delivery of weapons to reduce the cost per target. The requirements were finalized in 1963,

announcing the VAL (Heavier-than-air, Attack, Light) competition. To minimize costs, all proposals had to	
be based on existing designs. Vought, Douglas Aircraft, Grumman and North American Aviation responded.	
The Vought proposal was based on the successful Vought F-8 Crusader fighter, having a similar	
configuration, but shorter and more-stubby, with a rounded nose. It was selected as the winner in 1964, the	
company received a contract for the initial batch of aircraft, designated A-7. <sup>[1]</sup> In 1965, the aircraft received	
the popular name Corsair II, after Vought's highly successful Vought F4U Corsair of World War II. (There	
was also a Vought O2U Corsair biplane scout and observation aircraft in the 1920s.)	

#### General characteristics

Crew: 1

**Length:** 46 ft 2 in (14.06 m) **Wingspan:** 38 ft 9 in (11.8 m)

Width: 23 ft 9 in (7.24 m) wings folded

**Height:** 16 ft 1 in (4.9 m)

**Wing area:** 374.9 sq ft (34.83 m<sup>2</sup>) **Airfoil:** NACA 65A007 root and tip **Empty weight:** 19,127 lb (8,676 kg)

Max takeoff weight: 41,998 lb overload condition.

Fuel capacity: 1,338 US gal

**Powerplant:** 1 x PW TF-30-P-6; later 1 x Allison TF41-A-2 non-afterburning turbofan engine, 15,000 lbf

Performance

Maximum speed: 600 kn (690 mph at Sea level Range: 1,070 nmi; 1,231 mi maximum internal fuel **Ferry range:** 1,342 nmi; 1,544 mi (2,485 km) with

maximum internal and external fuel

Number built

**Propulsion** 

Unit cost

Service ceiling: 42,000

Wing loading:  $77.4 \text{ lb/sq ft } (378 \text{ kg/m}^2)$ 

Thrust/weight: 0.50

**Armament** 

**Guns:**  $1 \times M61A1$  Vulcan 20 mm (0.787 in) rotary

cannon with 1,030 rounds

**Hardpoints:** 6× under-wing: Missiles, Bombs, Rockets,

HARM, Tacts, Fuel/Refueling

# Ling-Temco-Vought A-7 "Corsair" II

### **Operational history**

### **United States Navy**

Initial operational basing/homeporting for U.S. Navy A-7 squadrons was at NAS Cecil Field, Florida for Atlantic Fleet units and NAS Lemoore, California for Pacific Fleet units. This was in keeping with the role of these bases in already hosting the A-4 Skyhawk attack squadrons that would eventually transition to A-7.Lynn Garrison in a F4U-7 leads A-7 Corsair IIs of VA-147, over NAS Lemoore, CA on 7 July 1967 prior to the type's first deployment to Vietnam on USS *Ranger*. The A-7A "NE-300" is the aircraft of the Air Group Commander (CAG) of Attack Carrier Air Wing 2 (CVW-2).

From 1967 to 1971, a total of 27 Navy squadrons took delivery of four different A-7A/B/C/E models. The Vought plant in Dallas, TX employed up to 35,000 workers who turned out one aircraft a day for several years to support the Navy carrier-based needs for Vietnam and SE Asia and commitments to NATO in Europe. In 1974, when the USS *Midway* (CV-41) became the first Forward Deployed Naval Force (FDNF) aircraft carrier to be homeported in Yokosuka, Japan, two A-7B squadrons assigned to Carrier Air Wing FIVE (CVW-5) were concurrently homeported at NAF Atsugi, Japan. In 1976, these squadrons (VA-93 and VA-56) finally transitioned to the much more advanced A-7E model. Six Naval Reserve attack squadrons would also eventually transition to the A-7, operating from NAS Cecil Field, Florida; NAS Atlanta/Dobbins ARB, Georgia; NAS New Orleans, Louisiana; NAS Alameda, California and NAS Point Mugu, California. An additional active duty squadron stood up in the 1980s, Tactical Electronic Warfare Squadron 34 (VAQ-34) at NAS Point Mugu, which would operate twin-seat TA-7C and EA-7L aircraft with both a pilot and a naval flight officer in an adversary electronic warfare role.

Early A-7s pilots lauded the aircraft for general ease of flying (with the exceptions of poor stability on crosswind landings and miserable stopping performance on wet runways with an inoperative anti-skid braking system) and excellent forward visibility but noted a lack of engine thrust. This was addressed with A-7B and more thoroughly with A-7D/E. The turbofan engine provided a dramatic increase in fuel efficiency compared with earlier turbojets – the A-7D was said to have specific fuel consumption one sixth that of an F-100 Super Sabre at equivalent thrust. An A-7D carrying 12 x 500 lb bombs at 480 mph at 33,000 ft used only 3,350 lb of fuel per hour. Typical fuel consumption at mission retrograde during aircraft carrier recovery was approximately 30 pounds per minute compared to 100+ pounds per minute for the Phantom F-4J/N series. The A-7 Corsair II was tagged with the nickname "SLUF" ("Short Little Ugly Fucker") by pilots.

#### **United States Air Force A-7D**

YA-7D-1-CV AF Serial No. 67-14582, the first USAF YA-7D, 2 May 1968. Note the Navy-style refueling probe and the modified Navy BuNo used as its USAF tail number. The United States Army has not been permitted to operate fixed-wing combat aircraft since the establishment of an independent United States Air Force in 1947. To meet its need for close air support of its troops in South Vietnam, the Army pressured the Air Force to procure a specialized subsonic close air support fixed-wing aircraft that would suit its needs better than the general-purpose supersonic aircraft that the USAF preferred.

https://en.wikipedia.org/wiki/LTV A-7 Corsair II