

FACT SHEET

U.S. Air Force Fact Sheet CESSNA A-37A

On Aug. 23, 1966, the USAF directed the establishment of a program to evaluate the A-37 in a combat environment. The project was named "Combat Dragon" and was designed to test the effectiveness of the A-37 in Close Air Support, counterinsurgency and escort missions in Vietnam. Besides testing the aircraft operationally, the project was also used to evaluate the maintenance, supply and manpower requirements. The Tactical Fighter Weapons Center directed the program and established a 350-man squadron with 25 A-37As at England Air Force Base, La. in early 1967. The unit was designated as the 604th Air Commando Squadron. Initial instructor pilot training began on March 29, 1967. Initial operations and combat orientation started on May 1. Phase I of Combat Dragon was done between June 19 and July 16, 1967 at England Air Force Base.



Cessna A-37A (S/N 67-14514) at Bien Hoa Air Base on Aug. 16, 1967. (U.S. Air Force photo)

Phase I measured data collection and analysis procedures to be used during the actual combat evaluation, train the A-37A pilots, establish a bombing and gunnery baseline and identify and fix problems with the aircraft.

The 604th ACS was moved to Bien Hoa Air Base, South Vietnam, between July 17 and Aug. 14, 1967. Phase II of Combat Dragon began on Aug. 15 and ended on Sept. 6. This phase of the project was used to familiarize the pilots was the operational areas of Vietnam and Laos. The data collection and evaluation system was also refined using forms and methods already in use in Southeast Asia. Phase III of Combat Dragon began on Sept. 7 and the first actual ground strike missions were flown. Phase III operations continued until Oct. 27. Phase IV of Combat Dragon was done between Oct. 28 and 30 and tested accelerated (maximum sortie generation) mission scheduling. Phase V began on Nov. 1 and tested the ability of the aircraft to operate from a forward operating location. Seven aircraft were deployed to Pleiku Air Base and flew combat mission through Dec. 2. The remaining 18 aircraft remained at Bien Hoa Air Base and flew normal (Phase III) combat strike missions.

The 604th ACS flew about 5,000 training and combat sorties during the five phases of the Combat Dragon project. During Phase III each aircraft averaged between three and four missions every two days. During Phase IV, the maximum sortie rate reached 6.3 missions per day per aircraft. During Phase V, three new missions were flown: Forward Air Control, armed reconnaissance and night interdiction. In addition to missions with South Vietnam, Phase V missions were flown in southeast Laos in the Tigerhound areas.

The operational test phases of the Combat Dragon project were concluded in early December 1967, and the evaluation team returned to the United States to finish data analysis and make recommendations. During combat operations, Combat Dragon A-37As flew 4,463 sorties and dropped over 19,000 pieces of ordnance during the 107 day evaluation period. The team found

the maintenance requirements of the A-37A to be lower than expected. The size of the squadron was acceptable for Phase III sortie rates, but would have to be increased for higher rates (i.e. there weren't enough pilots, crew chiefs and maintenance personnel to support high sortie generation rates). The A-37A was dependable and easy to maintain, so logistics and supply issues were not a major concern. The A-37A was judged to be an effective ground attack aircraft in the South Vietnam and Tigerhound areas (combat radius to 240 nm maximum). The A-37A was also an adequate Close Air Support aircraft; however, the low wing and limited right aft quadrant visibility when an observer wasn't flying (normally only a pilot flew) in the cockpit's right seat. One major problem identified involved the lack of fuel quantity gauges for the wingtip tanks and external drop tanks carried. For long duration missions, the pilot ran a significant risk of running out of fuel. Overall, the A-37A was judged an effective weapons system and full scale production of the A-37B proceeded based in part on the recommendations of the Combat Dragon team.

The <u>YA-37A</u> was permanently retired to the National Museum of the United States Air Force in July 1970 and remains on display in the <u>Modern Flight Gallery</u>.

IIVDE	Number built/ converted	Remarks
YA-38A	2	COIN Prototype
A-37A	39	Attack conversion of T-37B
A-37B	577	Improved A-37A

TECHNICAL NOTES:

Armament: One GAU-2/A 7.62mm Gatling gun, plus 6,000 lbs. (800 lbs. on each of the inboard pylons, 600 lbs. on the middle two pylons and 500 lbs. on the outboard pylon) of mixed ordnance on eight hardpoints, including additional gun pods, high-explosive bombs, fire bombs, rockets, grenades and/or missiles

Engines: Two General Electric J85-GE-17/A axial flow turbojets of 2,400 lbs. thrust each (engines had 2850 lbs. maximum thrust but were derated to 2,400 lbs. thrust for the A-37A)

Maximum speed: 407 knots at 17,000 ft., maximum power

Cruising speed: Approx. 300 knots

Range: 1,180 nautical miles with 846.7 gallons of fuel at 301 knots average in 3.96 hours at

12,130 lbs. takeoff weight

Combat radius: 129 nautical miles with 3,646 lb. payload at 258 knots avg. in 1.3 hours

Service ceiling: 43,980 ft., 500 fpm, combat weight, maximum thrust

Span: 38 ft. 5 in. **Length:** 29 ft. 4 in. **Height:** 9 ft. 6 in.

Weight: 13,500 lbs. gross weight

Crew: Two

Serial numbers: (YA-37A) 62-5950 and 62-5951; (A-37A) 67-14503 to 67-14541; (A-37B) 67-14776 to 67-14823; 67-22483 to 67-22491; 68-7911 to 68-7980; 68-10777 to 68-10827; 69-6334 to 69-6446; 70-1277 to 70-1312; 71-790 to 71-854; 71-858 to 71-873; 71-1409 to 71-1416; 73-1056 to 73-1115; 73-1654 to 73-1658; 74-998 to 74-1013; 74-1694 to 74-1723; 75-374 to 75-385; 75-410 to 75-417; 75-424 to 75-441; 75-669 to 75-680

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