Model Number: V-519, YA-7H, YA-7E

Model Name : Corsair II
Model Type: Demonstrator

From the very beginning of the A-7 Program, LTV sought to sell a two-place version of the airplane. The need was obvious, but at the time the Navy just wasn't interested. "Perhaps a little later, when the program has matured" was their position. In early 1972, Sol Love (who had moved up to the Program Director position because of the untimely death of Connie Lau) convinced General Manager Russ Clark that a company-funded prototype of the two-place version was desirable. This was to be the brilliant move that would sway the Navy toward purchase of this much-needed version of the airplane. Approval was granted and A-7E SerNo 156801



was bailed to LTV by the Navy. In a whirlwind design and manufacturing effort, the V-519 was born. Built on temporary tooling, and making maximum use of A-7E design knowledge and existing parts, the "White Whale", as it affectionately became known, took to the air in August 1972. Later it was redesignated as the YA-7H and ultimately became the YA-7E.

The YA-7E proved to be the ultimate sales tool and fetched orders for 60 two-place A-7's, known as the TA-7C. In all, orders for two-place A-7's totaled 102 aircraft that were flown by the U.S. Navy, the U.S. Air Force, and the air forces of Greece and Portugal. Company funding of the V-519 was a wise decision indeed. Its value did not end there, because the YA-7E became the company test and demonstration vehicle for hundreds of A-7 modifications and new systems applications. It operated for 13 years in that capacity and was ultimately sold for scrap. However, The old "White Whale" wouldn't die, and was purchased by an ex-military pilot turned Texas business man, and is being rebuilt as a flying airplane (in civilian garb, that is). It is a grand old bird that promises to be around for many more years before it retires to museum life.

Dimensions	
Wingspan	38.73 ft
Overall Langth	48.69 ft
Height	16.30 ft
Weights and Capacities	
Empty Weight	19155 lb
Gross Weight	35443 lb
Useful Load	
Fuel Capacity	1496 lb
Oil Capacity	
Powerplant Characteristics	
Type: Allison TF41-A-2	
Rating Thrust	14800 lb
Rating Thrust with afterburner	

Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level with afterburner	
Landing Speed, Sea Leavel	
Stall Speed, Sea Level	
Takeoff Distance	
Climb to 30K feet	
Maximum Range	
Service Ceiling	
Absolute Ceiling	
Crew: 2	
Armament: See Overview - "A-7 Aircraft Performa	nce Perspective"

Model Number : TA-7C Model Name : Corsair II Model Type: Trainer

Having been inspired by the marvels of flying the YA-7E and presented with the opportunity for a very economical program through the conversion of existing A-7A and A-7C airframes, the Navy placed it's initial order for three airplanes in 1975. While recognizing the airplane's value as a combat trainer, the natural appeal of the airplane as a two-place combat machine did not go unnoticed. The US Navy chose to produce the airplane equipped with the full complement of A-7E avionics. Powered by the existing TF-30 engine, it was another LTV bargain.



The TA-7C took a long time to happen, considering that the initial design was in place in 1965. Some management differences of opinion prevented any serious effort to the two-place airplane for at least 2 years

Dimensions	
Wingspan	38.73 ft
Overall Langth	48.69 ft
Height	16.30 ft
Weights and Capacities	

Empty Weight	19155 lb
Gross Weight	35443 lb
Useful Load	
Fuel Capacity	1496 lb
Oil Capacity	
Powerplant Characteristics	
Type: Allison TF41-A-402	
Rating Thrust	13400 lb
Rating Thrust with afterburner	
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level with afterburner	
Landing Speed, Sea Leavel	
Stall Speed, Sea Level	
Takeoff Distance	4200 ft
Climb to 30K feet	9.7 min
Maximum Range	
Service Ceiling	
Absolute Ceiling	
Crew: 2	
Armament: See Overview - "A-7 Aircraft Performance P	erspective"

Model Number : A-7K Model Name : Corsair II Model Type: Trainer

DOD strategy called for ultimate transfer of all A-7D's to the Air National Guard. Unlike the USAF, the Air National Guard determined that a two-place combat trainer was needed to assure the maximum in combat training effectiveness. Negotiations began for a two-place version of the aircraft. Designated the A-7K, it retained all of the features of the A-7D and was fully combat capable.



Dimensions	
Wingspan	38.73 ft
Overall Langth	48.69 ft
Height	16.06 ft
Weights and Capacities	
Empty Weight	21433 lb
Gross Weight	36686 lb
Useful Load	
Fuel Capacity	1496 lb
Oil Capacity	
Powerplant Characteristics	
Type: Allison TF41-A-1	
Rating Thrust	14500 lb
Rating Thrust with afterburner	
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level with afterburner	
Landing Speed, Sea Leavel	
Stall Speed, Sea Level	
Takeoff Distance	4250 ft
Climb to 30K feet	9.2 min
Maximum Range	
Service Ceiling	
Absolute Ceiling	

Crew: 2	
Armament:	See Overview - "A-7 Aircraft Performance Perspective"

Model Number: LANA (A-7D, A-7K)

Model Name : Corsair II
Model Type: Attack Bomber



Undoubtedly the most spectacular version of the A-7D and A-7K was the Low Altitude Night Attack (LANA) configuration, one which had the airplane flashing along 200 feet above the terrain at 500 knots in the dead of night! The idea was, of course, to fly below radar surveillance, pop up to weapons delivery altitude, release the weapons, and head for home before the enemy knew what hit him! The ultimate design goal was for this mission to be flown "hands off" by the pilot. After reaching cruise altitude, the pilot simply programmed his NavWeap Computer for the

mission and sat back while the airplane completed the task. It is unlikely that any pilot would follow this scenario but the airplane would be capable of it. Major system changes which equip the airplane with this capability include incorporation of the CP-1117/A computer with new LANA software, night vision cockpit lighting, improved autopilot, headup display unit, and radar plus many other system, control and display modifications

Dimensions	
Wingspan	38.73 ft
Overall Langth	46.13 ft
Height	16.06 ft
Weights and Capacities	
Empty Weight	
Gross Weight	35357 lb (A-7D) 36818 lb (A-7K)
Useful Load	
Fuel Capacity	9263 lb
Oil Capacity	
Powerplant Characteristics	
Type: Pratt & Whitney TF30-P6	
Rating Thrust	
Rating Thrust with afterburner	
Weight	
Size (length X diameter)	

Performance	
Maximum Speed, Sea Level with afterburner	
Landing Speed, Sea Leavel	
Stall Speed, Sea Level	
Takeoff Distance	3900 ft (A-7D) 4250 ft (A-7K)
Climb to 30K feet	8.2 min (A-7D) 9.2 min (A-7K)
Maximum Range	
Service Ceiling	
Absolute Ceiling	
<b>Crew:</b> 1 (A-7D), 2 (A-7K)	
Armament: See Overview - "A-7 Aircraft Performance	ce Perspective"

**Model Number :** A-7H and TA-7H

Model Name : Corsair II

**Model Type:** Attack Bomber and Trainer

In Vought's first international sale, 60 were sold to the Hellenic Air Force. Designated the A-7H, the only significant departure from the A-7E configuration was the deletion of inflight refueling and addition of the electrically started gas turbine engine starter employed on the A-7D. Following first flight on 6 May 1975, A-7H deliveries took place over a 2-year period beginning in the summer of 1975. During the same period, the TA-7C (a two-place trainer version) was under development. Impressed by the features of the two-place TA-7C, the Greek government placed an order for five of this model and designated it the TA-7H. Like the single-place airplane, the 2-place version lacked

only inflight refueling.
Deliveries took place
between July and
December 1980. A total
of 65 A-7's were
purchased, and the A7H fleet is still flying
today.



	A-7H	TA-7H
Dimensions		
Wingspan	38.73 ft	38.73 ft
Overall Langth	46.13 ft	48.49 ft
Height	16.06 ft	16.06 ft
Weights and Capacities		
Empty Weight	16091 lb	19719 lb
Gross Weight	34539 lb	35455 lb
Useful Load		
Fuel Capacity	9593 lb	9620 lb
Oil Capacity		
Powerplant Characteristics		
Type: Allison TF-41-A400		
Rating Thrust	14800 lb	14800 lb
Rating Thrust with afterburner		
Weight		
Size (length X diameter)		
Performance		
Maximum Speed, Sea Level with afterburner		
Landing Speed, Sea Leavel		
Stall Speed, Sea Level		
Takeoff Distance	3750 ft	4150 ft
Climb to 30K feet	7.8 min	8.4 min
Maximum Range		
Service Ceiling		
Absolute Ceiling		
<b>Crew:</b> 1 (A-7H), 2 (TA-7H)		
Armament: See Overview - "A-7 Aircraft Perform	ance Perspective	"
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**Model Number :** A-7P and TA-7P

Model Name : Corsair II

Model Type: Attack Bomber and Trainer

In May 1980, Vought received a contract to convert 20 A-7A's into A-7P's for the Portuguese Air Force. The A-7P was powered by the TF30-P408 engine and was equipped with A-7E avionics.



Deliveries began in December 1981. In May 1983, a contract was announced for an additional 24 A-7P's and 6 TA-7P's. Final delivery of all aircraft was completed in May 1986.



	A-7P	TA-7P
Dimensions		
Wingspan	38.73 ft	38.73 ft
Overall Langth	46.13 ft	48.49 ft
Height	16.06 ft	16.06 ft
Weights and Capacities		
Empty Weight	17084 lb	18750 lb
Gross Weight	32708 lb	34026 lb
Useful Load		
Fuel Capacity	10036 lb	10043 lb
Oil Capacity		
Powerplant Characteristics		
Type: Pratt & Whitney TF30-P408		
Rating Thrust		
Rating Thrust with afterburner		
Weight		
Size (length X diameter)		
Performance		
Maximum Speed, Sea Level with afterburner		
Landing Speed, Sea Leavel		
Stall Speed, Sea Level		
Takeoff Distance	3450 ft	3800 ft
Climb to 30K feet	7.9 min	8.8 min

Maximum Range	
Service Ceiling	
Absolute Ceiling	
Crew: 1 (A-7P), 2 (TA-7P)	
Armament: See Overview - "A-7 Aircraft Perfe	formance Perspective"

Model Number: YA-7F Model Name: Corsair II Model Type: Attack Bomber

In 1985, the. U. S. Air Force Systems Command issued a Request For Information (RFI) for study of the Close Air Support/Battlefield Area Interdiction (CAS/BAI) mission. The U.S. Army and the U.S. Air Force had long been at odds on the subject of close air support for infantry troops and this was yet another chapter in dealing with the problem. The product of the RFI was to be a technical report. In the boldest marketing move ever conceived and executed by the company, the decision was made to respond to the RFI with a proposal for an upgraded version of the A-7.



The strategy was to form a marketing "Superteam" which would blitz the customer with a series of presentations featuring the upgraded A-7 as the answer to the CAS/BAI problems, and follow that with a proposal for the airplane. Division President, Phil Greco, a leader with a marketing flare and the courage to attempt the near-impossible, commissioned a blue ribbon group to perform the program. Led by A-7 Engineering Director Betty Pearce, the top woman executive in the aerospace



industry, the team launched into a marketing effort that found no peer. After a series of presentations to USAF leaders all over the world, and the submission of an unsolicited proposal to the Air Systems Command, a contract (N33657-87-C-011)

was awarded for two prototype airplanes designated the YA-7F.

The principal feature of the YA-7F was incorporation of the Pratt & Whitney F100-PW-220

afterburning engine of 20,000 pounds thrust. This required structural modification of the fuselage to add 29.5 inches just forward of the wing, 18 inches immediately aft of the wing and upward rotation of the fuselage aft section to maintain ground



clearance. Wing strakes were also added. Other equipment provided was a 60-KVA generator, an

On-Board Oxygen Generating System (OBOGS), and revised cockpit controls and displays. Many other improvements were made throughout the airplane

The YA-7F first flew in November 1989 with test pilot Jim Read at the controls. Vought proposed to modify 307 Air National Guard A-7D's to the A-7F configuration at a unit flyaway cost of \$4.93 million. The two prototypes went on to complete a very successful flight test program at Edwards Air Force Base, but the USAF chose not to put the airplane into production.

Dimensions	
Wingspan	38.73 ft
Overall Langth	49.00 ft
Height	17.50 ft
Weights and Capacities	
Empty Weight	21800 lb
Gross Weight	46000 lb
Useful Load	
Fuel Capacity	10360 lb
Oil Capacity	
Powerplant Characteristics	
Type: Pratt & Whitney F100-PW-220	
Rating Thrust	
Rating Thrust with afterburner	
Weight	
Size (length X diameter)	
Performance	
Maximum Speed, Sea Level with afterburner	
Landing Speed, Sea Leavel	
Stall Speed, Sea Level	
Takeoff Distance	2500 ft
Climb to 30K feet	5.2 min
Maximum Range	
Service Ceiling	
Absolute Ceiling	
Crew: 1	
Armament: See Overview - "A-7 Aircraft Performance I	Perspective"

Model Number : A-7E (Thailand)

Model Name : Corsair II

Model Type: Attack Bomber

The Royal Thai Navy purchased 14 A-7E and four TA-7C airplanes for coastal defense and sea patrol duties. The airplanes are stationed at the former Vietnam era B-52 base at Utapao, now a Royal Thai Navy Station. The aircraft were subjected to extensive inspection and repair at the Naval Air Station, Jacksonville, Florida before delivery to Thailand. First delivery was during the summer of 1995.

No photographs availiable