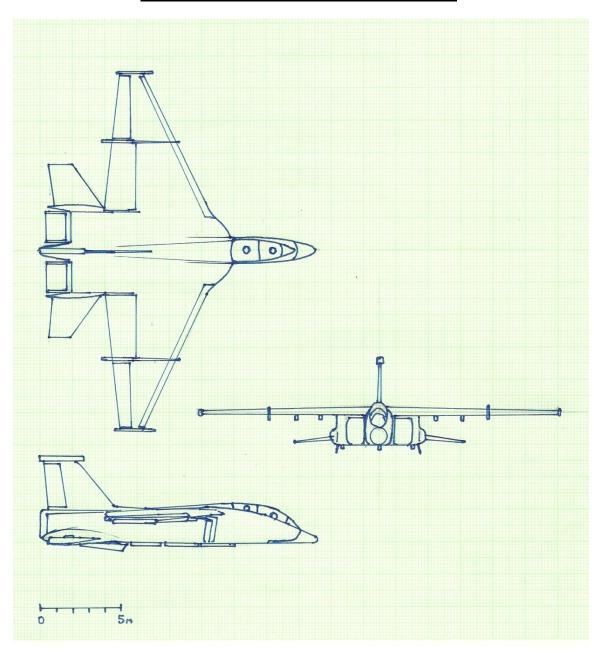
Republic A-3 THUNDERBOLT II



Characteristics:

- Tactical strike and close air support aircraft.
- Crew: 2 (Pilot, Navigator/Bombardier)
- Length: 18.2 m.
- Span: 22.2 m / 13.2 m (wings folded, for A-3N).
- Height: 6.2 m

- Weights: 13,100 kg / 28,820 lb (empty, operational, includes 1800 kg of structural steel armor); 31,200 kg / 68,640 lb (normal, C.A.S. configuration); 40,200 kg / 88,440 lb (max takeoff).
- Wing area: 56 m2.
- Wing loading: 557.1 kg/m2 (normal, 31,200 kg); 718 kg/m2 (max takeoff, 40,200 kg).
- Engines: Two Pratt & Whitney TF-58 turbofans with 2D vectoring nozzles and thrust reversers. Total thrust of 24,000 kg st / 52,800 lbf.
- Thrust/weight ratio: 0.77 (normal, 31,200 kg) / 0.6 (max takeoff, 40,200 kg).
- Fuel: Max total of 19,600 kg / 24,500 L of internal fuel. Up to five optional 1500 L drop tanks under wing and belly pylons. Retractable air refueling probe.
- Construction: Classic aluminum alloy construction. Cockpit section and engines cradles made of steel alloy armored structures integral to aircraft frame. Main hydraulic lines and command/power cabling inside armored steel ducts. Four aerobrakes for dive bombing.

Armament :

- Four 30mm internal cannons, each provisioned with 300 rounds.
- One belly retractable rocket launcher for 16 x 127mm rockets. Two belly retractable rocket launchers, each for 32 x 76mm rockets.
- Two wingtip launch rails for AIM-1 COBRA / AGM-1 NAGA missiles.
- Nine belly / wing pylons for max total 14,000 kg of missiles/bombs/drop tanks (including one optional nuclear bomb/missile on centerline belly pylon).

• Sensors/electronics:

- Air intercept radar in nose radome.
- Surface mapping and navigation radar under nose.
- High definition targeting/bombing radar in chin.
- Gunnery radar in nose.
- o Radar altimeter.
- Inertial navigation system with cockpit map display unit.
- Long range identification e/o telescope with stabilized camera lens in pod on top of vertical stabilizer.
- Heads-up display unit linked with forward-looking e/o camera pack
 (FLIR + LLLTV), aircraft attitude display and gun sight.
- Four other e/o camera packs giving night view in frontal arc, downforward and down vertical views.
- Radar warning receiver set.

- Four clear comms radios (2 UHF, 1 VHF, 1 HF) for joint services communications.
- Gun camera, plus bomb damage assessment camera in tail (pointed aft and down).
- TACAN receiver.
- IFF transponder.
- Radio direction-finding set.

Performances :

- Max speed : Mach 0.95.
- Combat radius: 350 miles / 560 km (internal fuel, 4,000 kg of external ordnance and six hours of loiter on station).
- o 1,600 miles / 2560 km (max takeoff, 8,000 kg of external ordnance).
- Ferry range: 7,000 miles / 11,200 km (max internal and external fuel, no external ordnance).

Variants:

- A-3A THUNDERBOLT II: strike/close air support aircraft. In USAF service in October 1952 'C'. In French Air Force Service in June 1953 'C'.
- A-3N: Carrier-capable variant of A-3A, with folding wings and arrester hook. In US Marine Corps service in October 1952 'C'. In US Navy service in February 1953 'C'. In French Navy Aéronavale service in June 1953 'C'.