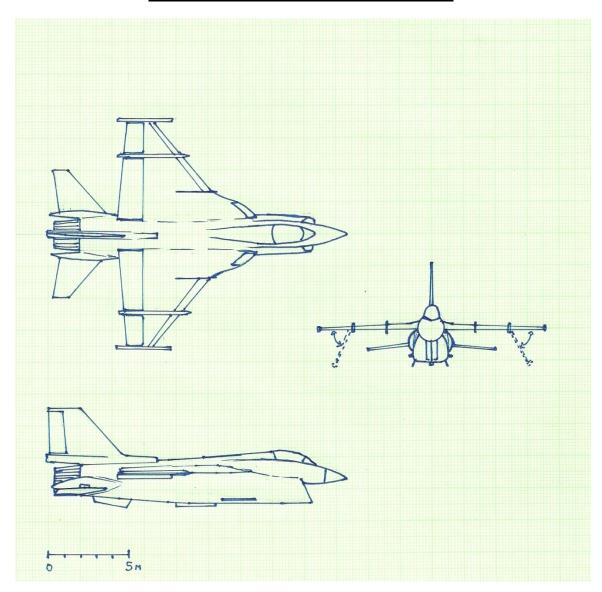
# **North American F-10 FALCON**



## **Characteristics:**

- Single seat day/night supersonic fighter.
- Crew: 1 pilot.
- Length: 19 m.
- Span: 14 m (tips horizontal) / 12 m (tips down 70°) / 10 m (winds folded, for F-10N).
- Height: 7.7 m (from ground level to top of rudder) / 5.5 m (vertical rudder folded, for F-10N).

- Weights: 9,500 kg / 20,900 lb (empty, operational); 19,500 kg / 42,900 lb (interceptor configuration); 24,000 kg / 52,800 lb (max takeoff).
- Wing area: 54 m2.
- Wing loading: 361 kg/m2 (interceptor, 19,500 kg) / 444 kg/m2 (max takeoff, 24,000 kg).
- Engine: One Pratt & Whitney TF-58P augmented turbofan. Dry thrust of 12,000 kg / 26,400 lbf. Augmented thrust of 17,000 kg / 37,400 lbf.
- Thrust/weight ratio: 0.87 (augmented thrust, interceptor) / 0.71 (augmented thrust, max takeoff).
- Fuel: Max 7,200 kg / 9,000 L internal. Up to five optional 1,500 L drop tanks. Retractable air refueling probes.
- Construction: Classic aluminum alloy construction, except for edges and tips exposed to aerodynamic heating (made of stainless steel honeycomb panels). Light aluminum armor around cockpit and engine belly (integral to structure). Wing tips can be lowered by 70° at supersonic speed to improve longitudinal stability and to provide smoother ride during low level penetration missions.

#### Armament :

- Two fixed 30mm cannons, each provisioned with 150 rounds.
- Four missile launch rails (2 at wing tips, 2 on fuselage sides) for AIM-1 COBRA or AGM-1 NAGA missiles.
- Four wing pylons, each rated for up to 1,500 kg of bombs/ missiles/ drop tanks.
- One belly pylon rated for up to 2,000 kg of bombs /missiles/ drop tanks.
- Two retractable rocket launcher pods, each for 18 x 76mm rockets.

#### • Sensors/electronics:

- Air intercept radar in nose radome.
- Gunnery radar in air intake partition.
- Surface navigation and bombardment radar in chin.
- Radar altimeter.
- Inertial navigation system with cockpit map display unit.
- Heads-up display unit linked with forward-looking e/o camera pack
  (FLIR + LLLTV), aircraft attitude and gun sight.
- Three other e/o camera packs giving night view in frontal arc and down-forward.
- o Radar warning receiver set.
- Four clear comms radios (2 UHF, 1 VHF, 1 HF) for joint services communications.
- Gun camera (in air intake partition.

- o TACAN receiver.
- IFF transponder.

### • Performances:

- Max speed: Mach 2 (1,500 mph / 2,400 kmh at 15,000 m altitude).
- Max speed at ground level: Mach 1.3 (970 mph /1,550 kmh).
- Combat radius: 350 miles / 560 km (interceptor, max internal fuel, 8 air-air missiles); 800 miles /1,280 km (hi-lo-hi strike, 4,000 kg of bombs/missiles).
- Ferry range: 2,900 miles / 4,640 km (with drop tanks).

#### • Variants:

- F-10A FALCON: Single seat fighter for USAF. In service in December 1952 'C'. In service with French Air Force in June 1953 'B'.
- F-10B: Two-seat combat trainer for USAF. In service in December 1952 'C'. In service with French Air Force in June 1953 'B'.
- F-10N: Single seat carrier-capable fighter with folding wings and vertical rudder and arrester hook. In service in February 1953 'C' with US Marine Corps and US Navy. In service with French Navy Aeronavale in June 1953 'B'.
- F-10NB: Two-seat carrier-capable combat trainer variant of F-10N.
  In service in February 1953 'C' with US Marine Corps and US
  Navy. In service with French Navy Aeronavale in June 1953 'B'.