

The T-100 Integrated Training System



The Training System of the future is here: Introducing the T-100 Integrated Training System

The T-100 Integrated Training System (ITS) is the world's most modern, advanced, and comprehensive 4th & 5th generation flying training system. The T-100 ITS builds upon the proven technology, systems and the international success of Alenia Aermacchi's M-346 advanced jet trainer system, now in production now for the Italian Air Force.

The T-100 ITS is the ideal system to replace the U.S. Air Force's current fleet of aging T-38 advanced jet trainers. The T-100 ITS is a total integrated training system that satisfies the advanced pilot training continuum, fully preparing pilots for the rigorous demands of 5th generation front line fighters such as the F-22 and F-35. The aircraft is capable of conducting sustained high-g operations, air refueling, night vision imaging systems operations, air-to-air intercepts, and data link operations. The T-100's vortex lift aerodynamics, variable camber wing, near 1:1 thrust to weight ratio, and fly-by-wire flight control system allow the aircraft to remain fully controllable at high angles of attack, ensuring maneuverability, performance and flying qualities close to that of a front line fighter.

Unlike other aircraft training systems, the T-100's ground based training system (GBTS) is designed specifically to be on par with front line 4th & 5th generation fighters. The flexible, modern GBTS is capable of conducting Distributed Mission Operations, providing highly realistic training. The T-100's GBTS includes full mission simulators, flight training devices, simulation based training, and egress trainers.

Embodying the very best of aeronautical and aerodynamics engineering and incorporating unique U.S. Air Force requirements, the T-100 provides state of the art technology at the lowest acquisition and life cycle costs of any advanced trainer on the market.

As a result of its multiple system redundancy, including twin engines, twin hydraulic and twin electrical systems, the T-100 offers the highest level of safety in its class. In the T-100, pilots are immersed in a realistic and complex training environment with the latest generation of avionics, state of the art pilot vehicle interface, and the in flight capacity to simulate tactical scenarios, sensors and weapons.

The T-100 ITS is the advanced jet training capability needed today to meet the training requirements of tomorrow.

T-100 TECHNICAL DATA



Dimensions

Span: 31.89 ft/9.72 m
 Length: 37.70 ft/11.49 m
 Height: 16.34 ft/4.98 m
 Wing area: 253.20 ft²/23.52 m²

Weights

Empty: 10,163 lb/4,610 kg
 T.O. (trainer): 14,770 lb/6,700 kg
 Weapon load (max): 6,615 lb/3,000 kg
 Max T.O. (armed): 20,945 lb/9,500 kg

Powerplant

Engine: 2 x F-124 GA-200 Honeywell turbofans
 Thrust: 2 x 6,250 lb/2 x 2,835 kg
 Internal fuel (usable): 4,409 lb/2,000 kg

Performance (clean, ISA)

Max level speed (5000 ft): 590 KTAS
 Limit speed: 572 KEAS
 Rate of climb: 21,000 ft/min
 Stall speed (landing, 100% fuel): 103 KCAS
 Service ceiling: 45,000 ft
 Range clean/3 ext. tanks (10% reserve): 1,500 nm/1,100 km
 Max sustained load factor [SL]: 8.0 g
 Max sustained load factor [15,000 ft]: 5.8 g
 Max sustained turn rate (15,000 ft): 14.5 deg/sec
 Take off ground run (s.l.): 950 ft/290 m
 Landing ground roll (s.l., 10% inter. fuel): 1,800 ft/550 m
 Limit load factor: +8/-3 g

Three View

