

ADVANCED PILOT TRAINER



Performance & **Specifications**

FLYAWAY COST: \$10 Million Typical Flyaway

AVAILABILITY: TBD

2,590

TYPE

Advanced Pilot Trainer (APT/T-X) and Supersonic Trainer (ST)

ACCOMMODATION

Flight Crew of Two Seated on Martin Baker MK16E Zero-Zero Ejection Seats

POWERPLANT

One (1) Honeywell F125-GA-100 Derivative Afterburning Turbofans delivering 9,850 lbs st with Afterburners and 6,230 lbs st at Military Power. The powerplant is fitted with variable geometry, thrust vectoring 2D nozzle.

STRUCTURE

Semi-monocogue aluminum lithium and aluminum honeycomb sandwich construction throughout. Titanium used in high fatigue areas and high temperature regions. Extensive use of Laser and Friction Stir Welding in all assemblies.

ARMAMENT

Fixed: T-X: None; Has provisions for one fuselage mounted M61A2 20mm gatling cannon with 500 rds Expendable: T-X: None; Has provisions for up to six external wing hardpoints for up to 7,000 lbs of external stores

DIMENSIONS

Wingspan Length Overall Height Overall	24 ft 0 in 41 ft 8 in 9 ft 0 in	Wing Area Wheelbase Wheeltrack	176 sq ft 15 ft 8 in 10 ft 8 in
WEIGHTS & CAPACITIES		LOADINGS	
Empty Weight Max Internal Fuel Max Payload Typical Takeoff Weight (TTW) Max Take-Off Weight (MTOW)	7,100 lbs 3,800 lbs 1,600 lbs 11,500 lbs 12,500 lbs	Wing Loading @ TTW (lbs/sq ft) Thrust-to-Weight @ TTW Wing Loading @ MTOW (lbs/sq ft) Thrust-to-Weight @ MTOW Positive Load Limit @ MTOW	65.3 0.86 71.0 0.79 9.0
PERFORMANCE			
Max Level Speed @ SL (KTAS) Max Level Speed @ Altitude (KTAS) Typical Cruise Speed @ Altitude (KTAS) Max Level Mach Number @ SL Max Level Mach Number @ Altitude Stall Speed @ SL (KTAS) Approach Speed @ SL (KTAS) Best Climb Speed @ SL (KTAS) Max Climb Rate @ SL (ft/min)-MTOW Max Climb Rate @ SL (ft/min)-TTW	760 840 490 1.15 1.46 95 114 465 24,500 26,700	Dash Range @ 1.46 Mach (nm) Cruise Range @ 0.90 Mach (nm) Cruise Range @ 0.80 Mach (nm) Takeoff, Ground Roll @ SL-MTOW (ft) Takeoff, BFL @ SL-MTOW (ft) Takeoff, BFL @ SL-TTW (ft) Takeoff, BFL @ SL-TTW (ft) Landing, Ground Roll @ SL-MTOW (ft) Landing, BFL @ SL-MTOW (ft) Landing, Ground Roll @ SL-TLW (ft)	275 1,273 1,712 1,516 2,220 1,267 1,993 2,643 3,318 1,823

Landing, BFL @ SL-TLW (ft)







Release: March 2017

Service Ceiling Exceeds (ft)