

STAVATTI™

SM-31 STILETTO T-X

Powered by
F125-GA-100



ADVANCED PILOT TRAINER

SM-31 STILETTO T-X

Performance & Specifications

TYPICAL FLYAWAY COST: \$14 Million

AVAILABILITY: 2024

TYPE

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

ACCOMMODATION

Flight Crew of Two Seated in Tandem on Martin Baker MK16E or MK18 Zero-Zero Ejection Seats

POWERPLANT

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

STRUCTURE

Semi-monocoque 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: None
Expendable: None; Has provisions for up to six external wing hardpoints for up to 1,100 lbs of external stores

DIMENSIONS

Wingspan	24 ft 0 in	Wing Area	176 sq ft
Length Overall	41 ft 8 in	Wheelbase	15 ft 8 in
Height Overall	9 ft 0 in	Wheeltrack	10 ft 8 in

WEIGHTS & CAPACITIES

Empty Weight	7,100 lbs
Max Internal Fuel	3,800 lbs
Max Payload	1,700 lbs
Mid-Mission Weight (MMW)	9,600 lbs
Max Take-Off Weight (MTOW)	12,500 lbs

LOADINGS

Wing Loading @ MMW (lbs/sq ft)	54.5
Thrust-to-Weight @ MMW	1.03
Wing Loading @ MTOW (lbs/sq ft)	71.0
Thrust-to-Weight @ MTOW	0.79
Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.00 Mach	Max Climb Rate @ SL; MTOW	25,885 ft/min
Max Level Speed @ FL350	1.43 Mach	Max Climb Rate @ SL; MMW	34,078 ft/min
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 1.43 Mach	220 nm
Max Cruise Speed @ FL350	0.90 Mach	Dash Radius @ 1.43 Mach	103 nm
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.90 Mach	1,665 nm
Typical Cruise Speed @ FL350	0.80 Mach	Cruise Radius @ 0.90 Mach	651 nm
Takeoff Speed; MTOW @ SL	140 Ktas	Ferry Range with External Tanks	2,441 nm
Stall Speed; MTOW @ SL	127 Ktas	Takeoff, Ground Roll @ SL-TTW	1,267 ft
Approach Speed; Landing Weight @ SL	114 Ktas	Takeoff, BFL @ SL-TTW	1,991 ft
Stall Speed; Landing Weight @ SL	95 Ktas	Landing, Ground Roll @ SL-TLW	1,203 ft
Service Ceiling Exceeds	60,000 ft	Landing, BFL @ SL-TLW	1,973 ft

