

STAVATTI™

SM-31T STILETTO

Powered by
F125X



ADVANCED PILOT TRAINER

SM-31T STILETTO

Performance & Specifications

FLYAWAY COST: \$23 Million Typical Flyaway

AVAILABILITY: TBD

TYPE

Advanced Pilot Trainer (APT), Supersonic Trainer (ST) and Light Fighter (LF)

ACCOMMODATION

Flight Crew of Two Seated in Tandem on Martin Baker MK16E or MK 18 Zero-Zero Ejection Seats

POWERPLANT

One (1) Honeywell F125X Afterburning Turbofan delivering 5,561 kgf st with Afterburner and 3,686 kgf 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: One fuselage mounted M61A2 20mm gatling cannon with 500 rds
Expendable: Internal Weapons Bay and six external wing hardpoints for up to 3,291 kg of external stores

DIMENSIONS

Wingspan	7.32 m	Wing Area	16.35 sq m
Length Overall	12.70 m	Wheelbase	4.78 m
Height Overall	2.74 m	Wheeltrack	3.25 m

WEIGHTS & CAPACITIES

Empty Weight	3,949 kg	Wing Loading @ MMW (kg/sq m)	326
Max Internal Fuel	1,816 kg	Thrust-to-Weight @ MMW	1.04
Max Warload	3,291 kg	Wing Loading @ MTOW (kg/sq m)	583
Mid-Mission Weight (MMW)	5,334 kg	Thrust-to-Weight @ MTOW	0.58
Max Take-Off Weight (MTOW)	9,532 kg	Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.03 Mach	Max Climb Rate @ SL; MTOW	109 m/sec
Max Level Speed @ FL400	1.30 Mach	Max Climb Rate @ SL; MMW	208 m/sec
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 1.00 Mach	724 km
Max Cruise Speed @ FL350	0.90 Mach	Dash Range @ 1.30 Mach	367 km
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.85 Mach	2,371 km
Typical Cruise Speed @ FL350	0.80 Mach	Air Superiority Radius, Internal Fuel	652 km
Takeoff Speed; MTOW @ SL	337 km/hr	Ferry Range with External Tanks	3,673 km
Stall Speed; MTOW @ SL	306 km/hr	Takeoff, Ground Roll @ SL-TTW	397 m
Approach Speed; Landing Weight @ SL	224 km/hr	Takeoff over 50 ft @ SL-TTW	675 m
Stall Speed; Landing Weight @ SL	194 km/hr	Landing, Ground Roll @ SL-TLW	678 m
Service Ceiling Exceeds	16,764 m	Landing over 50 ft @ SL-TLW	1,020 m

