

STAVATTI™

SM-31T STILETTO

Powered by
F125X



ADVANCED PILOT TRAINER

SM-31T STILETTO

Performance & Specifications

FLYAWAY COST: CONTACT STAVATTI

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 3,223 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
Max Internal Fuel	1,725 kg
Max Payload	3,631 kg
Mid-Mission Weight (MMW)	5,220 kg
Max Take-Off Weight (MTOW)	9,305 kg

LOADINGS

Wing Loading @ MMW (kg/sq m)	319
Thrust-to-Weight @ MMW	1.07
Wing Loading @ MTOW (kg/sq m)	569
Thrust-to-Weight @ MTOW	0.60
Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Climb Rate @ SL; MTOW	110 m/sec
Max Level Speed @ FL350	1.72 Mach	Max Climb Rate @ SL; MMW	201 m/sec
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 1.72 Mach	407 km
Max Cruise Speed @ FL350	0.90 Mach	Dash Radius @ 1.72 Mach	191 km
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.90 Mach	2,458 km
Typical Cruise Speed @ FL350	0.80 Mach	Cruise Radius @ 0.90 Mach	728 km
Takeoff Speed; MTOW @ SL	328 km/hr	Ferry Range with External Tanks	3,671 km
Stall Speed; MTOW @ SL	278 km/hr	Takeoff, Ground Roll @ SL-TTW	418 m
Approach Speed; Landing Weight @ SL	235 km/hr	Takeoff, BFL @ SL-TTW	623 m
Stall Speed; Landing Weight @ SL	196 km/hr	Landing, Ground Roll @ SL-TLW	454 m
Service Ceiling Exceeds	15,240 m	Landing, BFL @ SL-TLW	676 m

