STAVATTI™

SM-31T STILETTO

Powered by

F125X

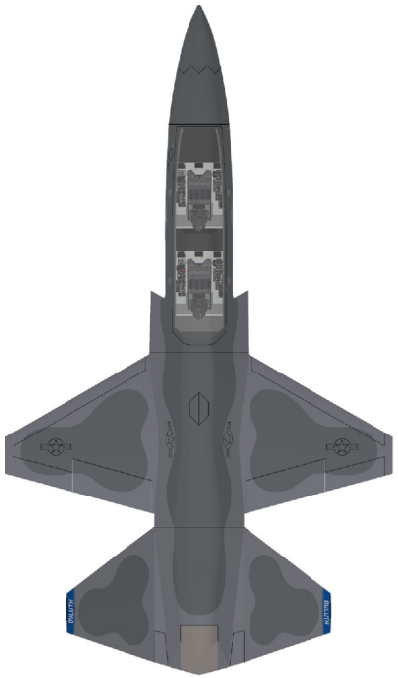
ADVANCED PILOT TRAINER

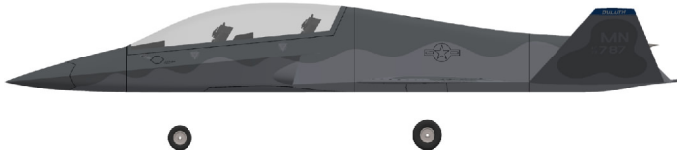
STAVATTI AEROSPACE • PO Box 211258 Eagan, MN 55121 USA • TEL: (651) 238-5369 • email: stiletto@stavatti.com • http://www.stavatti.com

SM-31T STILETTO

Performance & Specifications

FLYAWAY COST: $17 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 MK18 Zero-Zero Ejection Seats

POWERPLANT

One (1) Honeywell F125X Derivative Afterburning Turbofan delivering 12,250 lbs st with Afterburner and 8,120 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: One fuselage mounted M61A2 20mm gatling cannon with 500 rds
Expendable: Internal Weapons Bay and six external wing hardpoints for up to 7,100 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		LOADINGS	
Empty Weight	8,700 lbs	Wing Loading @ MMW (lbs/sq ft)	65.3
Max Internal Fuel	3,800 lbs	Thrust-to-Weight @ MMW	1.07
Max Payload	8,000 lbs	Wing Loading @ MTOW (lbs/sq ft)	116.5
Mid-Mission Weight (MMW)	11,500 lbs	Thrust-to-Weight @ MTOW	0.60
Max Take-Off Weight (MTOW)	20,500 lbs	Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Climb Rate @ SL; MTOW	21,717 ft/min
Max Level Speed @ FL350	1.72 Mach	Max Climb Rate @ SL; MMW	39,554 ft/min
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 1.65 Mach	220 nm
Max Cruise Speed @ FL350	0.90 Mach	Dash Radius @ 1.65 Mach	103 nm
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.90 Mach	1,327 nm
Typical Cruise Speed @ FL350	0.80 Mach	Cruise Radius @ 0.90 Mach	452 nm
Takeoff Speed; MTOW @ SL	177 Ktas	Ferry Range with External Tanks	1,982 nm
Stall Speed; MTOW @ SL	150 Ktas	Takeoff, Ground Roll @ SL-TTW	1,370 ft
Approach Speed; Landing Weight @ SL	127 Ktas	Takeoff, BFL @ SL-TTW	2,045 ft
Stall Speed; Landing Weight @ SL	106 Ktas	Landing, Ground Roll @ SL-TLW	1,490 ft
Service Ceiling Exceeds	50,000 ft	Landing, BFL @ SL-TLW	2,218 ft

Copyright © 2020 Stavatti Aerospace Ltd.