

STAVATTI™

# SM-31A STILETTO

*Powered by*  
**F125-GA-100**



## ADVANCED PILOT TRAINER

# SM-31A STILETTO

## Performance & Specifications

TYPICAL FLYAWAY COST: \$20 Million

AVAILABILITY: TBD

### TYPE

Advanced Pilot Trainer (APT) 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 7,250 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	Wing Loading @ MMW (lbs/sq ft)	54.5
Max Internal Fuel	4,000 lbs	Thrust-to-Weight @ MMW	1.03
Max Payload	1,700 lbs	Wing Loading @ MTOW (lbs/sq ft)	71.0
Mid-Mission Weight (MMW)	9,600 lbs	Thrust-to-Weight @ MTOW	0.79
Max Take-Off Weight (MTOW)	12,500 lbs	Positive Load Limit @ MTOW	9.0

### PERFORMANCE

Max Level Speed @ SL	1.00 Mach	Max Climb Rate @ SL; MTOW	26,591 ft/min
Max Level Speed @ FL400	1.04 Mach	Max Climb Rate @ SL; MMW	35,679 ft/min
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 1.00 Mach	441 nm
Max Cruise Speed @ FL350	0.90 Mach	Cruise Range @ 0.90 Mach	1,083 nm
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.80 Mach	1,343 nm
Typical Cruise Speed @ FL350	0.80 Mach	Air Superiority Radius, Internal Fuel	371 nm
Takeoff Speed; MTOW @ SL	140 Ktas	Ferry Range with External Tanks	2,271 nm
Stall Speed; MTOW @ SL	128 Ktas	Takeoff, Ground Roll @ SL-TTW	1,763 ft
Approach Speed; Landing Weight @ SL	114 Ktas	Takeoff, Over 50 ft @ SL-TTW	2,736 ft
Stall Speed; Landing Weight @ SL	99 Ktas	Landing, Ground Roll @ SL-TLW	1,997 ft
Service Ceiling Exceeds	60,000 ft	Landing, Over 50 ft @ SL-TLW	3,102 ft

