

STAVATTI™ SM-39



RAZOR

AIR DOMINANCE FIGHTER

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

SM-39 RAZOR

Performance & Specifications

FLYAWAY COST: \$85 Million

AVAILABILITY: TBD

TYPE

Air Dominance Fighter, Interceptor and All-Weather Strike Fighter/Fighter Bomber

ACCOMMODATION

Single Pilot Seated on a MK18 or ACES 5 Zero-Zero Ejection Seat or Proprietary Ejection Seat

POWERPLANT

Two 52,400 lbs static thrust NeoThrust E1400-SE-520 variable cycle afterburning turbofans with MHD Energy Bypass
/or/ Two 50,000 lbs static thrust class GEAE ACE variable cycle afterburning turbofans

STRUCTURE

Semi-monocoque titanium foam metal sandwich construction throughout with multiple titanium sine-wave spars in the cantilever wings and empennage. Titanium metal ceramics (cermets) used in high temperature regions.

ARMAMENT

Fixed: One Engine Driven Gas Dynamic Directed Energy Laser Weapon
Expendable: Two internal weapon bays and four external wing hardpoints for carriage of up to 25,000 lbs of stores

DIMENSIONS

Wingspan	54 ft 6 in	Wing Area	1,132 sq ft
Length Overall	78 ft 6 in	Wheelbase	28 ft 4 in
Height Overall	13 ft 8 in	Wheeltrack	16 ft 9 in

WEIGHTS & CAPACITIES

Empty Weight	46,000 lbs
Max Internal Fuel	30,000 lbs
Max Warload	25,000 lbs
Typical Combat Weight (TCW)	65,000 lbs
Max Take-Off Weight (MTOW)	100,000 lbs

LOADINGS

Wing Loading @ TCW (lbs/sq ft)	57.4
Thrust-to-Weight @ TCW	1.60
Wing Loading @ MTOW (lbs/sq ft)	88.3
Thrust-to-Weight @ MTOW	1.04
Positive Load Limit @ MTOW	7.5

PERFORMANCE

Max Level Speed @ SL	1.30 Mach	Max SL Climb Rate @ MTOW	49,500 ft/min
Max Level Speed @ FL300 Exceeds	2.45 Mach	Max SL Climb Rate @ TCW	75,000 ft/min
Max Level Speed @ FL600 Exceeds	3.85 Mach	Max Speed Range @ FL300	350 nm
Max Level Speed @ FL900 Exceeds	4.00 Mach	Max Speed Range @ FL600	970 nm
Supercruise Speed @ FL650 Exceeds	3.70 Mach	Max Speed Range @ FL900	1,635 nm
Typical Cruise Speed @ FL400 ft	0.90 Mach	Supercruise Range @ FL600	2,065 nm
Typical Takeoff Speed @ SL	151 KTAS	Tactical Radius, Hi-Lo-Hi	1,300 nm
Typical Approach Speed @ SL	115 KTAS	Ferry Range-External Tanks	5,000 nm
Typical Landing Stall Speed @ SL	96 KTAS	Takeoff over 50 ft, Takeoff Weight	1,457 ft
Service Ceiling Exceeds	100,000 ft	Landing over 50 ft, Landing Weight	1,985 ft

