

STAVATTI
SM-39



RAZOR

AIR DOMINANCE FIGHTER

SM-39 RAZOR

Performance & Specifications

FLYAWAY COST: \$85 Million

AVAILABILITY: TBD

TYPE

Next Generation Air Dominance Fighter, Carrier Air Defense and All-Weather Strike Fighter/Fighter Bomber

ACCOMMODATION

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

POWERPLANT

Two 52,400 lbs static thrust NeoThrust E1400-NT-524 variable cycle afterburning turbofans with MHD Energy Bypass /or/ Two 50,000 lbs static thrust class GE ACE or P&W 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: Engine Driven Gas Dynamic Directed Energy Laser Weapon or one M61A2 20mm Cannon with 1,000 rds
Expendable: Two internal weapon bays and four external wing hardpoints for carriage of up to 25,000 lbs of stores

DIMENSIONS

Wingspan	53 ft 0 in	Wing Area	1,026 sq ft
Length Overall	70 ft 0 in	Wheelbase	25 ft 0 in
Height Overall	13 ft 8 in	Wheeltrack	16 ft 9 in

WEIGHTS & CAPACITIES

Empty Weight	44,500 lbs
Max Internal Fuel	30,000 lbs
Max Warload	25,000 lbs
Navy Carrier Takeoff Weight	80,000 lbs
Max Take-Off Weight (MTOW)	100,500 lbs

LOADINGS

Wing Loading @ TCW (lbs/sq ft)	64.3
Thrust-to-Weight @ TCW	1.59
Wing Loading @ MTOW (lbs/sq ft)	97.9
Thrust-to-Weight @ MTOW	1.04
Positive Load Limit @ MTOW	7.5

PERFORMANCE

Max Level Speed @ SL	1.40 Mach	Max SL Climb Rate @ MTOW	60,636 ft/min
Max Level Speed @ FL350 Exceeds	2.40 Mach	Max SL Climb Rate @ TCW	99,485 ft/min
Max Level Speed @ FL600 Exceeds	4.20 Mach	Max Speed Range @ FL350	245 nm
Max Level Speed @ FL800 Exceeds	4.20 Mach	Max Speed Range @ FL900	1,277 nm
Supercruise Speed @ FL400 Exceeds	2.00 Mach	Supercruise Range @ FL400	1,700 nm
Typical Cruise Speed @ FL400 ft	0.90 Mach	Max Cruise Range @ FL350	2,426 nm
Typical Takeoff Speed @ SL	136 KTAS	Tactical Radius, Air Superiority	1,400 nm
Typical Approach Speed @ SL	105 KTAS	Ferry Range-External Tanks	5,200 nm
Typical Landing Stall Speed @ SL	91 KTAS	Takeoff over 50 ft, Takeoff Weight	1,888 ft
Service Ceiling Exceeds	100,000 ft	Landing over 50 ft, Landing Weight	1,250 ft

