

STAVATTI[®]

SM-475



AIR DEFENSE FIGHTER

SM-47S SUPER MACHETE

Performance & Specifications

FLYAWAY COST: \$30 Million Typical Flyaway

AVAILABILITY: TBD

TYPE

Single Seat Air Defense Fighter (ADF) and Strike Fighter (SF)

ACCOMMODATION

Single Pilot Seated on a MK16E, MK18 or ACES 5 Zero-Zero Ejection Seat

POWERPLANT

One (1) General Electric Aircraft Engines F414 Enhanced Afterburning Turbofan delivering 26,600 lbs st with Afterburner and 16,232 lbs st at Military Power. The powerplant may be fitted with a thrust vectoring nozzle.

STRUCTURE

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

ARMAMENT

Fixed: One Nose mounted General Dynamics six barrel M61A2 20mm gatling cannon with 1,000 rds
Expendable: Eight external wing hardpoints for carriage of up to 12,000 lbs of external stores

DIMENSIONS

Wingspan	33 ft 4 in	Wing Area	308 sq ft
Length Overall	42 ft 0 in	Wheelbase	16 ft 6 in
Height Overall	12 ft 4 in	Wheeltrack	12 ft 0 in

WEIGHTS & CAPACITIES

Empty Weight	16,000 lbs	Wing Loading @ TCW (lbs/sq ft)	76.9
Max Internal Fuel (IF)	7,000 lbs	Thrust-to-Weight @ TCW	1.12
Max Warload	12,000 lbs	Wing Loading @ MTOW (lbs/sq ft)	116.9
Typical Combat Weight (TCW)	23,700 lbs	Thrust-to-Weight @ MTOW	0.74
Max Take-Off Weight (MTOW)	36,000 lbs	Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Speed Range-Clean, IF	230 nm
Max Level Speed @ 15,000 ft	1.60 Mach	Max Speed Radius-Clean, IF	103 nm
Max Level Speed @ 35,000 ft	2.27 Mach	Supercruise Range-Clean, IF	945 nm
Max Supercruise @ 15,000 ft	1.00 Mach	Supercruise Radius-Clean, IF	462 nm
Max Supercruise @ 35,000 ft	1.00 Mach	0.85 Mach Range-Loaded, IF	1,420 nm
Typical Cruise @ 25,000 ft	0.85 Mach	0.85 Mach Radius-Loaded, IF	694 nm
Typical Cruise @ 35,000 ft	0.85 Mach	0.85 Mach Ferry Range-External Tanks	2,051 nm
Typical Approach Speed @ SL	133 KTAS	Takeoff Ground Roll, Takeoff Weight	1,575 ft
Typical Landing Stall Speed @ SL	111 KTAS	Landing Ground Roll, Landing Weight	1,989 ft
Max Initial Rate-of Climb @ SL	47,700 ft/min	Service Ceiling Exceeds	55,000 ft

