

# STAVATTI™ SM-475



## AIR DEFENSE FIGHTER

# SM-47S SUPER MACHETE

## Performance & Specifications

FLYAWAY COST: \$25 Million Typical Flyaway

AVAILABILITY: TBD

### TYPE

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

### ACCOMMODATION

Single Pilot Seated on a Martin Baker MK16E 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
Max Internal Fuel	7,000 lbs
Max Warload	12,000 lbs
Typical Combat Weight (TCW)	23,700 lbs
Max Take-Off Weight (MTOW)	36,000 lbs

### LOADINGS

Wing Loading @ TCW (lbs/sq ft)	76.9
Thrust-to-Weight @ TCW	1.12
Wing Loading @ MTOW (lbs/sq ft)	116.9
Thrust-to-Weight @ MTOW	0.74
Positive Load Limit @ MTOW	9.0

### PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Speed Range-Clean, Internal Fuel	230 nm
Max Level Speed @ 15,000 ft	1.60 Mach	Max Speed Radius-Clean, Internal Fuel	103 nm
Max Level Speed @ 35,000 ft	2.27 Mach	Supercruise Range-Clean, Internal Fuel	945 nm
Max Supercruise @ 15,000 ft	1.00 Mach	Supercruise Radius-Clean, Internal Fuel	462 nm
Max Supercruise @ 35,000 ft	1.00 Mach	0.85 Mach Range-Loaded, Internal Fuel	1,420 nm
Typical Cruise @ 25,000 ft	0.85 Mach	0.85 Mach Radius-Loaded, Internal Fuel	694 nm
Typical Cruise @ 35,000 ft	0.85 Mach	0.85 Mach Ferry Range-2 x 330 USG 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

