

STAVATTI™
SM-47S



AIR DEFENSE FIGHTER

SM-47S SUPER MACHETE

FLYAWAY COST: \$25 Million Typical Flyaway

AVAILABILITY: TBD

Performance & Specifications

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

| | | LOADINGS | |
|-----------------------------|------------|---------------------------------|-------|
| Empty Weight | 16,000 lbs | Wing Loading @ TCW (lbs/sq ft) | 76.9 |
| Max Internal Fuel | 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, 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 |

