

STAVATTI™ SM-47T



AIR DEFENSE/STRIKE FIGHTER

SM-47T SUPER MACHETE

Performance & Specifications

FLYAWAY COST: \$26 Million Typical Flyaway

AVAILABILITY: TBD

TYPE

Two Seat Air Defense Fighter (ADF),Strike Fighter (SF) and Advanced Supersonic Trainer (AST)

ACCOMMODATION

Flight Crew of Two Seated on Martin Baker MK16E Zero-Zero Ejection Seats

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 | 16,770 lbs |
| Max Internal Fuel | 6,000 lbs |
| Max Warload | 12,000 lbs |
| Typical Combat Weight (TCW) | 24,200 lbs |
| Max Take-Off Weight (MTOW) | 36,000 lbs |

LOADINGS

| | |
|---------------------------------|-------|
| Wing Loading @ TCW (lbs/sq ft) | 78.6 |
| Thrust-to-Weight @ TCW | 1.10 |
| 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 | 185 nm |
| Max Level Speed @ 15,000 ft | 1.60 Mach | Max Speed Radius-Clean, Internal Fuel | 83 nm |
| Max Level Speed @ 35,000 ft | 2.27 Mach | Supercruise Range-Clean, Internal Fuel | 756 nm |
| Max Supercruise @ 15,000 ft | 1.00 Mach | Supercruise Radius-Clean, Internal Fuel | 367 nm |
| Max Supercruise @ 35,000 ft | 1.00 Mach | 0.85 Mach Range-Loaded, Internal Fuel | 1,132 nm |
| Typical Cruise @ 25,000 ft | 0.85 Mach | 0.85 Mach Radius-Loaded, Internal Fuel | 550 nm |
| Typical Cruise @ 35,000 ft | 0.85 Mach | 0.85 Mach Ferry Range-2 x 330 USG Tanks | 1,821 nm |
| Typical Approach Speed @ SL | 136 KTAS | Takeoff Ground Roll, Takeoff Weight | 1,575 ft |
| Typical Landing Stall Speed @ SL | 113 KTAS | Landing Ground Roll, Landing Weight | 2,072 ft |
| Max Initial Rate-of Climb @ SL | 47,700 ft/min | Service Ceiling Exceeds | 55,000 ft |

