

STAVATTI® SM-47A



ADVANCED TRAINER

SM-47A SUPER MACHETE

Performance & Specifications

FLYAWAY COST: \$25 Million Typical Flyaway

AVAILABILITY: TBD

TYPE

Advanced Pilot Trainer (APT/T-X) and Supersonic Trainer (ST)

ACCOMMODATION

Flight Crew of Two Seated on Martin Baker MK16E or MK18 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: None; Has provisions for one nose mounted M61A2 20mm gatling cannon with 1,000 rds
Expendable: None; Has provisions for up to Eight external wing hardpoints for 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	14,900 lbs
Max Internal Fuel	6,000 lbs
Max Warload	0 lbs
Mid Mission Weight (MMW)	18,500 lbs
Max Take-Off Weight (MTOW)	21,500 lbs

LOADINGS

Wing Loading @ MMW (lbs/sq ft)	60.0
Thrust-to-Weight @ MMW	1.44
Wing Loading @ MTOW (lbs/sq ft)	69.8
Thrust-to-Weight @ MTOW	1.24
Positive Load Limit @ MTOW	15.0

PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Speed Range, Internal Fuel	189 nm
Max Level Speed @ 15,000 ft	1.60 Mach	Max Speed Radius, Internal Fuel	85 nm
Max Level Speed @ 35,000 ft	2.27 Mach	Supercruise Range, Internal Fuel	864 nm
Max Supercruise @ 15,000 ft	1.00 Mach	Supercruise Radius, Internal Fuel	420 nm
Max Supercruise @ 35,000 ft	1.00 Mach	0.85 Mach Cruise Range, Internal Fuel	1,359 nm
Typical Cruise @ 25,000 ft	0.85 Mach	0.85 Mach Cruise Radius, Internal Fuel	661 nm
Typical Cruise @ 35,000 ft	0.85 Mach	0.85 Mach Ferry Range, 2 x 330 Tanks	1,907 nm
Typical Approach Speed @ SL	127 KTAS	Takeoff Ground Roll, Takeoff Weight	962 ft
Typical Landing Stall Speed @ SL	106 KTAS	Landing Ground Roll, Landing Weight	1,829 ft
Max Initial Rate-of-Climb @ SL	47,700 ft/min	Service Ceiling Exceeds	55,000 ft

