

STAVATTI™

SM-47 T-X



ADVANCED PILOT TRAINER

# SM-47 T-X SUPER MACHETE

## Performance & Specifications

FLYAWAY COST: \$20 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 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

