

STAVATTI™
SM-27J



Turbofan Machete

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Machete Turbofan

Performance & Specifications

FLYAWAY COST: \$16 Million to \$20 Million

AVAILABILITY: Anticipated 2014

TYPE

Single Seat Close Air Support (CAS), COunter-INSurgency (COIN), and Forward Air Control (FAC)

ACCOMMODATION

Single Pilot Seated on a Martin Baker MK.16E Zero-Zero Ejection Seat

ARMAMENT

One Ventral Centerline Mounted General Dynamics Four Barrel GAU-13/A 30mm Gatling Cannon with 675 rds;
Eight Underwing Stores Pylons with 14-in Suspension For Maximum External Load of 8,000 lbs.

DIMENSIONS

Wingspan	50 ft 0 in	Wheelbase	14 ft 11 in
Length Overall	38 ft 0 in	Wheeltrack	10 ft 9 in
Height Overall	12 ft 9 in		
Wing Area	280 sq ft		

POWERPLANT

One (1) General Electric Aircraft Engines Non-Afterburning F414 Derivative Turbofan Delivering 14,756 lb st.

WEIGHTS & CAPACITIES

Empty Weight	12,202 lbs
Maximum Internal Fuel	6,000 lbs
Max External Load/Warload	8,000 lbs
Clean Take-Off Weight (CTOW)	19,605 lbs
Typical Combat Weight (TCW)	21,105 lbs
Max Take-Off Weight (MTOW)	27,605 lbs

LOADINGS

Wing Loading @ TCW (lbs/sq ft)	75.4
Thrust-to-Weight Ratio @ TCW	0.70
Wing Loading @ MTOW (lbs/sq ft)	98.7
Thrust-to-Weight Ratio @ MTOW	0.53
Positive Load Limit @ TCW	9.8
Negative Load Limit @TCW	-4.9

PERFORMANCE

Max Level Speed @ SL	575 KTAS	Tactical Radius-Internal Fuel	735 nm
Max Level Speed @ 35,000 ft	500 KTAS	Ferry Range-External Tanks	2,400 nm
Max Cruise Speed @ 25,000 ft	510 KTAS	Max Cruise Range-Internal Fuel	1,300 nm
Max Cruise Speed @ 35,000 ft	517 KTAS	Max Cruise Range-External Tanks	1,800 nm
Typical Cruise Speed @ 25,000 ft	490 KTAS	Typical Cruise Range-Internal Fuel	1,600 nm
Typical Cruise Speed @ 35,000 ft	460 KTAS	Typical Cruise Range-External Tanks	2,100 nm
Loiter Speed @ SL	200 KTAS	Loiter Endurance @ SL-Internal Fuel	4.0 Hrs
Approach Speed, Landing Config.	112 KTAS	Service Ceiling Exceeds	50,000 ft
Stall Speed, Landing Config.	102 KTAS	Take-Off Distance over 50 ft Obstacle	1,304 ft
Max Initial Rate-of Climb @ SL	21,604 ft/min	Landing Distance over 50 ft Obstacle	1,354 ft

