

STAVATTI[®] SM-100



NEXT GEN TRANSPORT

SM-100 TRANSPORT

Performance & Specifications

FLYAWAY COST: \$32 Million Basic Equipped

AVAILABILITY: TBD

TYPE

Twin Engine Next Generation Utility Transport for Military Tactical Airlift.

ACCOMMODATION

Flight crew of 2 with up to 72 commercial passengers with 31 in Seat Pitch or 81 Troops or 62 Litter Patients.

POWERPLANT

Two (2) Pratt & Whitney Canada Enhanced Performance PW150 Turboprops, each rated at 6,000 SHP @ 1,020 RPM at sea level. The powerplants each drive a 13 ft 6 in diameter, 8-blade Scimitar propeller in a tractor configuration.

STRUCTURE

Cantilever three spar semi-monocoque aluminum foam metal sandwich wing and empennage with modular four element semi-monocoque aluminum foam metal sandwich fuselage.

PAYLOAD CONFIGURATIONS

Number 20 ft Sea-Land Containers	1	Number 17 in Economy Seats @ 31 in Pitch	72
Number LD-3 Containers	6	Design Payload with Max Fuel	25,000 lbs
Number 88" x 108" 463L Pallets	4	Max Payload with Reduced Fuel	35,000 lbs

EXTERNAL DIMENSIONS

Wingspan	100 ft 0 in
Length	85 ft 0 in
Height	20 ft 9 in
Wing Area	900 sq ft

WEIGHTS & CAPACITIES

Empty Weight	42,000 lbs
Max Internal Fuel	22,000 lbs
Max Fuel Payload	25,000 lbs
Useful Load	48,000 lbs
Typical Landing Weight (TLW)	70,200 lbs
Max Take-Off Weight (MTOW)	90,000 lbs

PERFORMANCE

Max Level Speed @ SL	375 KTAS
Max Level Speed @ FL150	403 KTAS
Max Level Speed @ FL250	400 KTAS
Cruise Speed @ SL	300 KTAS
Cruise Speed @ FL150	350 KTAS
Cruise Speed @ FL250	365 KTAS
Takeoff Speed @ MTOW w/BLC, SL	102 KTAS
Approach Speed @ TLW w/BLC, SL	60 KTAS
Landing Stall Speed @ TLW w/BLC, SL	52 KTAS

INTERNAL DIMENSIONS

Cargo Hold Length	35 ft 0 in
Cargo Hold Max Width	11 ft 10 in
Cargo Hold Max Height	10 ft 0 in
Cargo Hold Floor Area	395 sq ft

LOADINGS

Wing Loading @ MTOW (lbs/sq ft)	100.0
Power Loading @ MTOW (lbs/shp)	7.5
Wing Loading @ TLW (lbs/sq ft)	78.0
Power Loading @ TLW (lbs/shp)	5.6
Positive Load Limit @ MTOW	2.5
Positive Load Limit @ TLW	3.2

Max Climb Rate @ SL	2,231 ft/min
Service Ceiling	45,000 ft
Max Range @ FL150	3,522 nm
Max Range @ FL250	3,924 nm
Max Payload (35K lbs) Range @ FL150	1,596 nm
Max Payload (35K lbs) Range @ FL250	1,749 nm
Ferry Range With Roll-On Tank	8,598 nm
Takeoff over 50 ft, MTOW w/BLC	2,200 ft
Landing over 50 ft, TLW w/BLC	1,093 ft

