

STAVATTI™ *SM-940K*



AERIAL REFUELING TANKER

SM-940K Air Refueler and Transport

Performance & Specifications

BASE FLYWAY COST: \$300 Million

AVAILABILITY: TBD

TYPE

Next Generation Twin Engine Aerial Refueling and Transport Aircraft

FLIGHT CREW

Flight Crew: 3 Seating for Additional/Optional Air Crew: 18

PASSENGER & PAYLOAD CONFIGURATIONS

195 Passengers in a Palletized Seating Configuration (13 seat pallets with 15 seats per pallet)
168 Medical litter Patients
28 Standard 463L Pallets (108 in wide x 88 in long)

POWERPLANTS

Two (2) Rolls Royce Trent XWB-97 Turbopfans Delivering 97,000 lbs st; Total Aircraft sl st of 194,000 lbs

STRUCTURE

Semi-monocoque aluminum lithium foam metal sandwich construction throughout with three titanium sine-wave spars in the cantilever wings and empennage. Titanium metal ceramics (cermets) used in high temperature regions.

EXTERIOR DIMENSIONS

Wingspan 212 ft 0 in
Length 226 ft 4 in
Height 59 ft 5 in
Wing Area 3,780 sq ft

INTERIOR DIMENSIONS

Cabin Length 166 ft 0 in
Cabin Width-Max 19 ft 2 in
Cabin Height-Max 10 ft 10 in
Cabin Floor Area 3,136 sq ft

WEIGHTS & CAPACITIES

Empty Weight 248,000 lbs
Fuel Capacity 350,000 lbs
Max Transfer Fuel 300,000 lbs
Useful Load 350,000 lbs
Max Take-Off Weight (MTOW) 606,000 lbs

LOADINGS

Wing Loading @ MTOW (lbs/sq ft) 160
Thrust-to-Weight @ MTOW (lbs/st) 0.32
Limit Load Factor @ MTOW 2.50
Ultimate Load Factor@ MTOW 3.75

PERFORMANCE

Max Level Speed @ FL350	0.97 Mach	Range @ 0.96 Mach/FL450*	5,753 nm
Typical Cruise Speed @ FL350	0.85 Mach	Range @ 0.95 Mach/FL450*	6,469 nm
Max Level Speed @ FL400	0.97 Mach	Range @ 0.85 Mach/FL400*	8,148 nm
Typical Cruise Speed @ FL400	0.85 Mach	Range @ 0.80 Mach/FL300*	8,331 nm
Takeoff Speed @ MTOW, SL	174 KTAS	Radius @ 0.80 Mach/FL400-100K TFOL**	3,538 nm
Approach Speed; Landing Weight	135 KTAS	Radius @ 0.80 Mach/FL400-200K TFOL**	1,694 nm
Stall Speed; Landing Configuration	104 KTAS	Ferry Range @ 0.85 Mach/FL400***	13,525 nm
Max Initial Rate-of Climb @ SL	10,427 ft/min	Take-Off Distance over 50 ft Obstacle	6,414 ft
Service Ceiling	50,000 ft	Landing Distance over 50 ft Obstacle	3,253 ft

*Range includes 30 min fuel reserves & 30 min Loiter; offload of up to 100,000 lbs of transfer fuel
**Radius includes 120 min fuel reserves & 60 min Loiter; Transfer Fuel Off-Load (TFOL)
*** Ferry Range includes 350,000 lbs of combined flight mission and transfer fuel.

