

Mission Specification

Purpose: Competitive alternative to the Boeing 737-800 or Airbus A321 small capacity, medium range commercial jet transport

Payload: 160 passengers at 175 lb. each, plus baggage at 30 lb. each in 2-class seating

Crew: 2 flight crew at 175 lb. each plus baggage at 30 lb. each
3 cabin attendants at 130 lb. each plus baggage at 30 lb. each

Range with design payload: 3000 n.mi.

Reserve Fuel: FAR 121 Domestic Reserves

Cruise altitude: 35,000 ft.

Long range cruise speed: Mach number 0.80

Climb direct to 35,000 ft. at maximum takeoff gross weight

Takeoff Field Length: 7,400 ft at Sea Level, standard day conditions, at maximum takeoff weight

Landing Field Length: 5,500 ft. at Sea. Level, standard day conditions, at maximum landing weight

Powerplants: 2 BPR 6.0 turbofans

Pressurization: 5,000 ft. cabin altitude at 35,000 ft. cruise altitude

Certification basis: FAR 25 and 121

Mission Profile: FAR Part 121 Domestic Operations (see document "Mission Profiles")

8: Descent
9: Cruise
10: Climb