

**PHENOM** 300<sup>®</sup>  
BY EMBRAER

SPECIFICATION



IT'S WHERE YOU WANT TO BE

A DIFFERENT CLASS OF  
EXECUTIVE JET

The Phenom 300 is arguably the most innovative light jet available. Not only does it have a stylish, spacious interior, but it also has cutting-edge avionics and delivers outstanding performance.



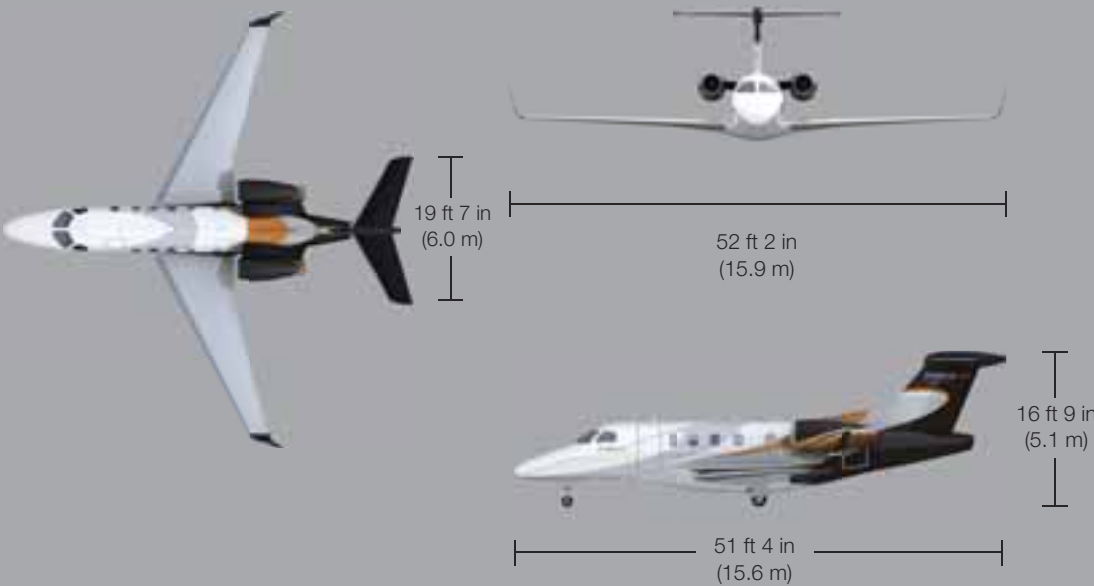
GENERAL DATA

Range @ 6 Occupants (LRC, NBAA IFR res)	1,971 nm / 3,650 km
Maximum Operating Speed	M 0.78
High Speed Cruise	453 kt / 839 km/h
Take-off Distance (MTOW, SL, ISA)	3,138 ft / 956 m
Landing Distance (MLW, SL, ISA )	2,621 ft / 799 m
Maximum Payload	2,416 lb / 1,096 kg
Service Ceiling	45,000 ft / 13,716 m
Propulsion	Pratt & Whitney PW535-E
Engine Thrust / Flat Rating	3,360 lb / ISA + 15°C
Avionics	Prodigy™ Flight Deck 300
Block Fuel for 1,000 nm	2,403 lb / 1,090 kg
External Noise	24 EPNdB below stage 4
Seating Capacity (crew/max occupants)	1/11
Main Baggage Compartment	66 ft³ / 1.87 m³

REDEFINING COMFORT

When we created the Phenom 300 our aim was to give unprecedented space for up to eleven people.

DIMENSIONS



CROSS SECTION



TYPICAL INTERIOR  
CONFIGURATION



AVIONICS

Prodigy™ Flight Deck 300 was exclusively developed for the Phenom 300's needs and takes advantage of Embraer's extensive experience developing cockpits for commercial and defense jets. Human factors, enhanced situational awareness, a glass cockpit with large displays, state-of-the-art avionics and single-pilot operation are the design drivers behind every detail of this flight deck. Pilots will experience one of the most advanced avionics suites in the market.

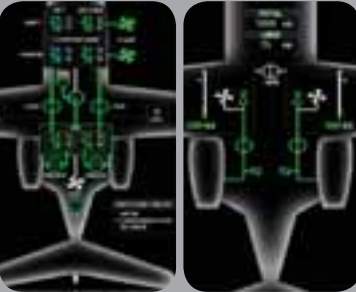


- Three widescreen 12.4" interchangeable displays
- Soft keys on displays minimize navigation time on menus
- No overhead panel and reduced number of switches
- Reduced pilot checklists thanks to smart systems automatism
- Engine Indication and Crew Alerting System (EICAS)
- Electronic checklist and system synoptics
- Weather radar with vertical scan capability
- Coupled VNAV (Vertical Navigation) and RNP 1 (Required Navigation Performance)
- WAAS (Wide Area Augmentation System) LPV (Localizer Performance with Vertical Guidance)
- Data link via SATCOM
- Central Maintenance Computer (CMC): quick fault location and isolation

SYNTHETIC VISION  
SYSTEM (SVS)



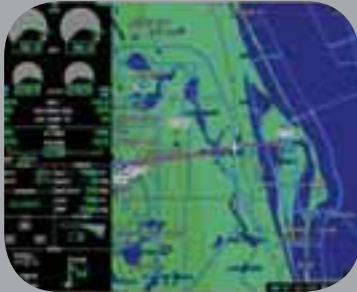
SYNOPTIC VIEWS



ELECTRONIC  
STAND-BY  
INSTRUMENT  
(IESI)



GRAPHICAL FLIGHT  
MANAGEMENT SYSTEM



ELECTRONIC  
CHARTS



SYSTEMS

SINGLE POINT REFUELING AND EXTERNALLY SERVICED LAVATORY

Airline-like single point refueling with external indication of actual fuel and selected fuel.



FEATURES	PHENOM 300	CJ3	CJ4	HW 400XP
SINGLE POINT REFUELING	YES	NO	YES	NO
EXTERNALLY SERVICED LAVATORY	YES	NO	NO	NO
BRAKE-BY-WIRE	YES	NO	NO	NO
CARBON BRAKES	YES	NO	NO	NO

SMARTPROBE™

Two Smartprobes™ are electronically interfaced together and combine multi-function probes and all air data computer functions. This eliminates the angle of attack sensor, pneumatic tubing, pressure lags and pressure checks. Smartprobes™ are also easier to maintain and replace due to their reduced size, weight and power.

ANTI-ICE SYSTEM

Instead of using mechanical de-icing boots, the Phenom 300 is the only jet in its category with a bleed air anti-ice system in all ice protected areas (wings, empennage and engine).

BRAKE-BY-WIRE AND CARBON BRAKES

Brake-by-wire requires less ongoing maintenance and improves safety. Compared to steel brakes, carbon brakes need less component parts replacing and there is no thermal distortion.

FLY-BY-WIRE MULTI-FUNCTIONAL SPOILERS

The system has 3 distinct functions:

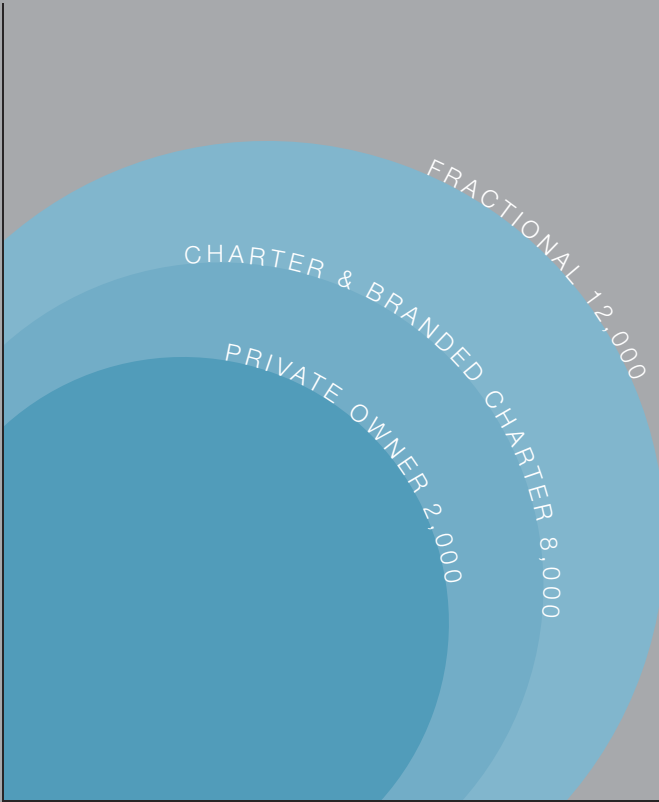
- Automatic differential roll spoiler actuation to augment roll authority in-flight
- Automatic lift dump function
- Speed brake function



THE HIGH UTILIZATION ‘DNA’

The Phenom 300 is the only light jet designed for high utilization.

- All main electronic equipment is inside pressurized areas
- Interchangeable avionic displays
- All antennas, pitot tubes and ADS sensors are externally replaceable
- Brushless electric fuel pumps and flight control actuators
- Wide use of LED lights – 10 to 20 times better MTBF than filament lights
- Engine replacement by two mechanics in 2-4 hours
- Windshield replaced from outside by only one person
- Standardized screws and grease types
- Low intervention philosophy (MSG-3)
- Quick fault location and isolation to component level (Central Maintenance Computer)
- All systems synoptics
- Integrated EICAS



PHENOM 300 ECONOMIC LIFE 35,000 HOURS →



# A LIGHT JET THAT GOES FURTHER

The Phenom 300 strikes the finest balance of speed, field performance and range of any aircraft in its category.



LOS ANGELES



ASPEN



NEW YORK



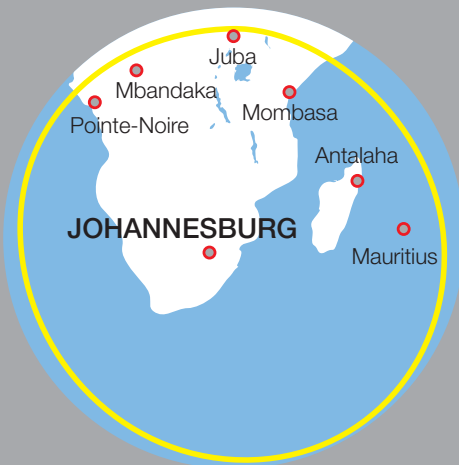
LONDON



MOSCOW



SÃO PAULO



JOHANNESBURG



DUBAI



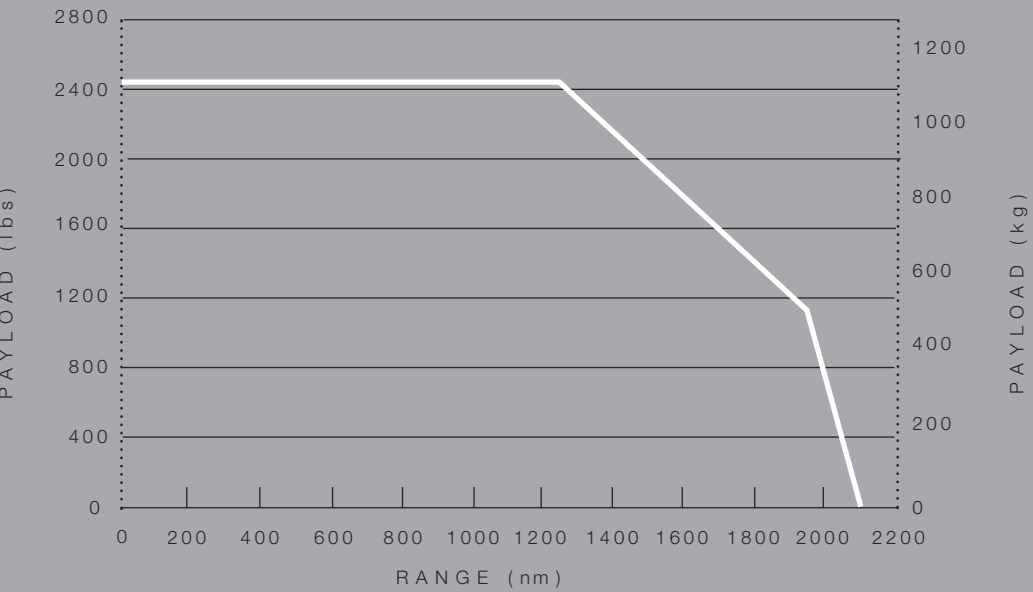
MUMBAI



BEIJING

6 occupants @ 200 lb (91 kg) each, LRC, ISA temperature in route, 85% annual winds, 85% takeoff temperatures, 3% airways allowances, NBAA IFR reserves – 100 nm alternate airport, 35 min holding at 5,000 ft.

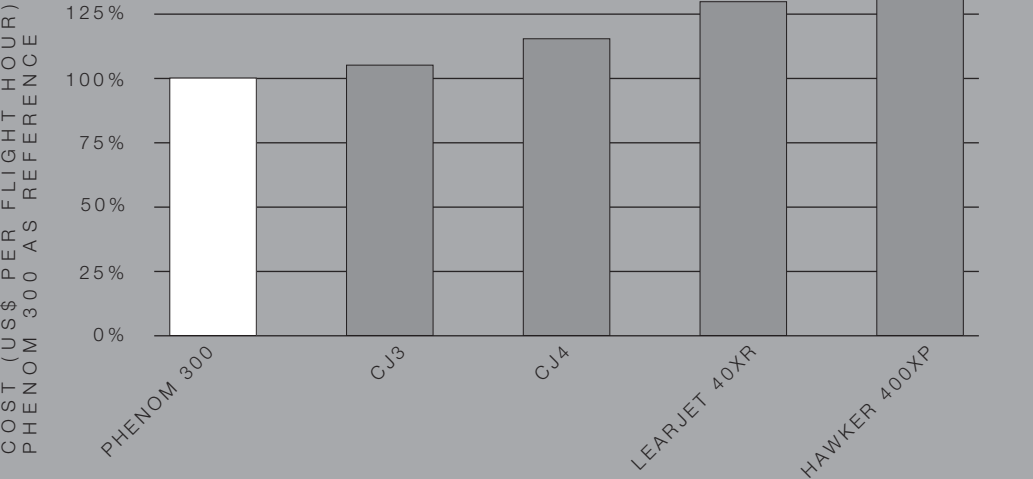
## PAYLOAD VS RANGE



LRC, ISA, Sea Level, NBAA IFR reserves, 1 pilot @ 200 lb, FAA baseline

## DIRECT OPERATING COST

The Phenom 300 burns up to 14% less fuel and carbon emissions per typical flight than its closest competitor, making it the greenest aircraft in the category, it's also the least expensive to operate with a total DOC advantage of 18%.



Conklin & de Decker – The Aircraft Cost Evaluator 2010 Vol. 1

AN INTELLIGENT USE OF SPACE

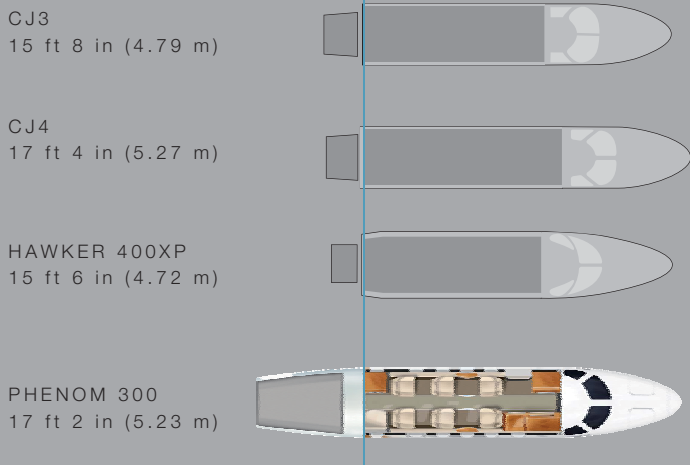
CROSS SECTION

Compare a competitor's standard circular cross section to our Oval Lite® design. You'll see passengers enjoy more head and leg-room in the Phenom 300.



CJ4 cross section used as reference.

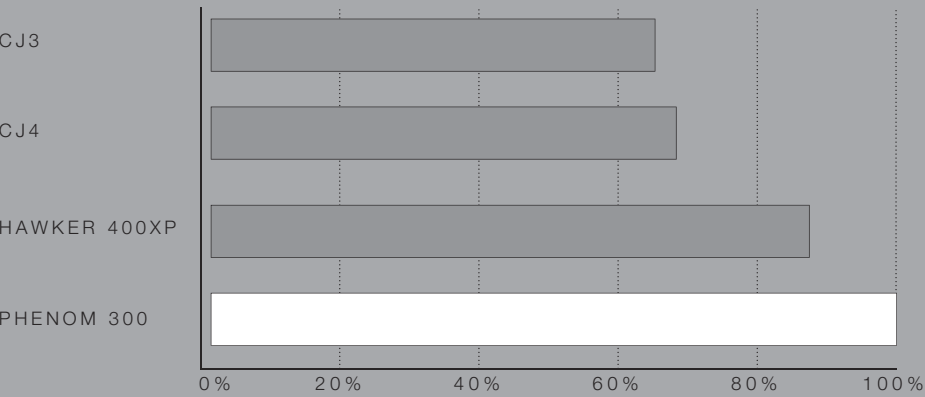
CABIN LENGTH



B&CA Purchase Planning Handbook 2010

AIRSTAIR DOOR AREA

The only jet in its class with an airstair door.



Embraer's estimate based on source Conklin & de Decker – Aircraft Performance Comparator 2009/2010

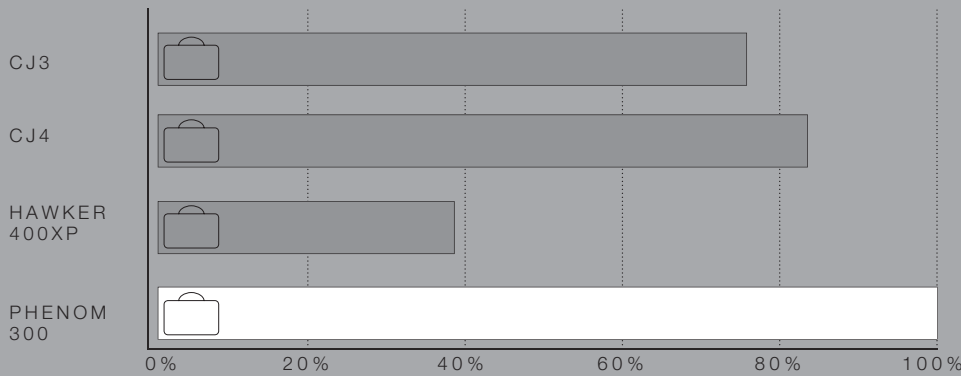


BAGGAGE COMPARTMENT

Pack whatever you need. The Phenom 300's baggage compartment is large enough to hold 6 golf bags or 6 pairs of skis, plus 6 garment bags, 6 roll-on bags and 6 laptop bags.

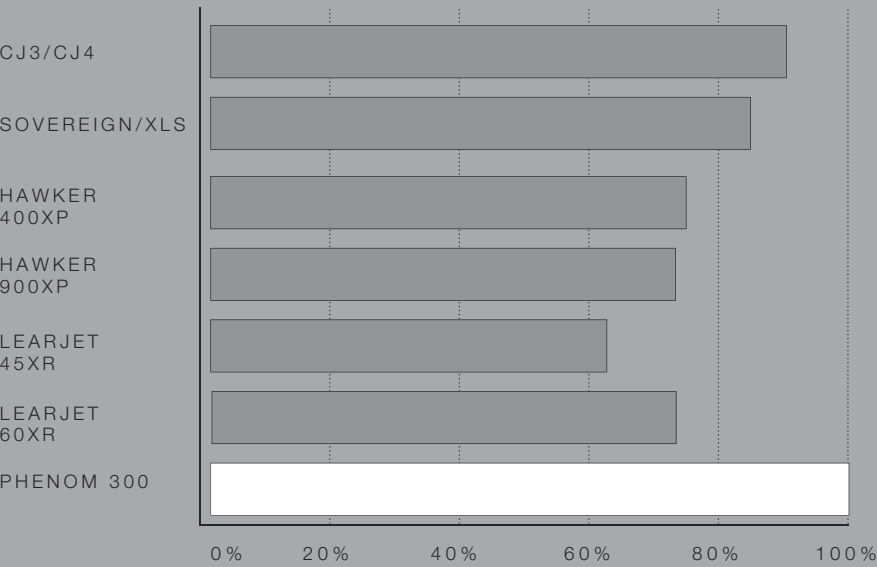


MAIN BAGGAGE VOLUME



B&CA Purchase Planning Handbook 2010 & Cessna's Materials

WINDOW AREA



Embraer's estimate based on source Conklin & de Decker – Aircraft Performance Comparator 2009/2010



INTERIOR COMFORT

SEAT MOVEMENT



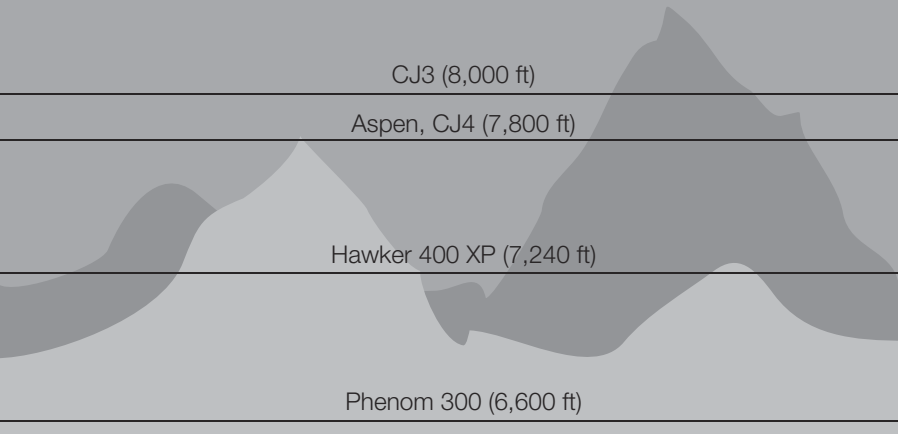
- Innovative design: BMW Group DesignworksUSA lines
- Swivel, lateral and longitudinal movement capability for ALL seats
- Full recline capability

IN-FLIGHT ENTERTAINMENT  
AND CONNECTIVITY

- Temperature control
  - Lighting control
  - Wireless headphones
  - VIP controller
  - Video control
  - Moving map
  - Cabin audio control
- XM radio
  - Media player
  - In-flight phone
  - Cabin speaker and subwoofer
  - 10.4" LCD ceiling – mount monitor
  - 7" LCD individual arm monitors

CABIN ALTITUDE

The lowest cabin pressure altitude in the category ensures you arrive fully rested at your destination.



FLOOR PLAN

You can choose to have a galley, a divan or an extra seat.



WE'RE HERE FOR YOU

Our heritage in commercial aircraft since 1969 means we have many years of experience in delivering excellent customer support. We have used this to develop a specific program for the executive jets market, which is customized to each client's needs. There are Embraer Executive Jet Service Centers located around the world, which means you will never be far away from a service center, dedicated to executive jets.

EMBRAER - AUTHORIZED SERVICE CENTERS

- PHENOM
- LEGACY
- LINEAGE
- EMBRAER - OWNED SERVICE CENTERS
- EMBRAER - OWNED DISTRIBUTION CENTERS



New locations for Embraer Authorized Service Centers under development.

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