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EMBRAER
Executive Jets



PROGRESS REPORT



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From the desk of Luís Carlos Affonso

The Phenom 100 is flying across the Americas! It was truly an honor to deliver the first Phenom 100 to Jim and Betsy Frost, who have been with us since day one, not only as customers, but also as invaluable contributors on the program advisory board.

As the production rate for the Phenom 100 climbs, we are pleased to hear reports of its docile flying qualities from our first customers.

The Phenom 300 program has gained additional wings with more aircraft now in the Flight Test campaign.

Enjoy the news!

The Phenom Programs

Announced in May 2005, the Phenom 100 performed its first flight in July 2007, having been certified and delivered in December 2008. The Phenom 300, launched at the same time, first took flight in April 2008 and is currently performing the certification campaign. Entry into service is expected in the second half of 2009.

The Phenom jets are clean-slate designs, envisioned to offer premium comfort, outstanding performance and low operating cost. Embraer has partnered with renowned aviation industry leaders to manufacture and support the Phenom 100 and Phenom 300.



The Phenom 100 Program



First Phenom 100 Delivered

Deliveries

First Phenom 100 Delivery – On December 29th, the first Phenom 100 was delivered to James and Elizabeth Frost, who live in Houston, Texas, where Mrs. Frost runs a family partnership in real estate and mineral holdings and Mr. Frost manages new business projects. Mr. Frost has been flying since the age of 16, and Mrs. Frost, who began flying in the mountains of Colorado, is a Certified Flight Instructor and has logged several thousand hours over the last 15 years.



Betsy and Jim Frost
First Phenom 100 Pilots



Betsy and Jim Frost in their Phenom 100

Customer Support and Services

Maintenance Program – Embraer Executive Care (EEC) is a fixed cost-per-hour maintenance program created in 2001 for the Legacy 600. The Phenom EEC program was launched during the National Business Aviation Association (NBAA) Annual Meeting and Convention, in October 2008, and offers both Phenom 100 and Phenom 300 customers the confidence and predictability of fixed-cost maintenance support, including access to web-based maintenance tracking software.

EEC

EMBRAER EXECUTIVE CARE

The Phenom 100 Program – continued

Customer Support and Services

"The response has been excellent, with a strong majority of our Phenom customers indicating their intention to enroll upon delivery," says Scott Kalister, Embraer Vice President Customer Support USA, Canada, and the Caribbean – Executive Jets. "This confirms for us the value the EEC program provides to the individual owner in managing the cost of maintaining their aircraft."

James and Elizabeth Frost signed up for Embraer Executive Care.

"The EEC program is an important part of the overall ownership experience, giving us a known operational cost per hour for an airplane that has almost no operational maintenance history," says Jim Frost. "The EEC also allows us to change the operation profile as our flight schedule changes, and we expect it to provide nose-to-tail coverage of just about any need we have with our new Phenom jet," said Jim Frost.



Certification

EASA Certification – The Phenom 100 certification campaign for operation in Europe is progressing well. The majority of the Certification Review Items have been finalized. Meetings have been conducted with EASA officials, who have also flown the Phenom 100. The European certification of the Phenom 100 is expected for the second quarter of 2009.

The Phenom 300 Program

Test Campaign

Flight Test Fleet – The fourth Phenom 300 took flight at the end of February. This jet, with registration number PP-XVL, and the third (PP-XVK), are being operated from the Company's Gavião Peixoto plant, in Brazil, alongside the first two Phenom 300 jets.



Fourth Phenom 300 First Flight – December 2008

The Phenom 300 Program – continued

Test Campaign

Flight Test Fleet – The four aircraft in the test fleet include two fully instrumented, one equipped with basic interior and flight test instrumentation, and another one, with interior furnishings, which will be used for function and reliability tests and in the maturity campaign. So far, the entire fleet has performed over 300 hours of test flight.

“As the Phenom 300 light jet certification and maturity campaign progresses, the deliveries of the first Phenom 100 entry level jets are taking place,” said Mauricio Almeida Filho, Embraer Vice President, Programs – Executive Jets. “We expect this crucial phase for the Phenom 300 to be every bit as successful as it was for the Phenom 100.”



Phenom 300 Nose Landing Gear Drop Test

Flight and Ground Tests – The Phenom 300 has flown at an altitude of 45,000 feet, while maintaining the cabin altitude as low as 6,600 feet. Its maximum cruise speed of 450 KTAS (833 km/h) and Mach 0.78 has been demonstrated. Flight and ground tests concluded include in-flight engine thrust determination and restart, water spray, fire extinguishing, and fuel tests. Other tests accomplished are engine controllability initial evaluation, V_{mo} envelope opening and fuel heating model validation.

Rigs – Rigs have been used to refine avionics, to check the airplane's environmental systems, and to regulate the generation and distribution of electricity. Fuselage and Wing probes were produced in January and February to commence static and fatigue tests.

Aerodynamics and Icing – Ongoing tests are dealing with aerodynamics and artificial ice shapes. The autopilot is being put through its paces, and avionics tests are successfully proceeding. Lightning strike, High Intensity Radiated Field (HIRF), natural ice, crosswinds, cold soak and external noise tests have begun in North America and will extend through May.

Landing Gears – Landing gear drop certification tests were accomplished in last December.

Certification and Maturity – The certification campaign will require around 1,400 flight hours, and the Phenom 300 is firmly working towards its conclusion in the second half of 2009. Over 150 hours will be flown for the maturity campaign.



Phenom 300 Main Landing Gear Drop Test

Phenom 100 Pilot Reports

Business & Commercial Aviation



Phenom 100 – Pilot Report – Fred George first flew the Phenom 100 before its certification last September.

Our overall impression was that the Phenom 100 is very easy to fly, having one of the most intuitive cockpits of any business aircraft yet produced, docile handling manners and simple, reliable systems.

- Fred George, *Business & Commercial Aviation*, Oct '08

Flight International



Phenom 100 – Building on a Legacy – Michael Gerzanics flew the first prototype of the Phenom 100 in mid-December and reported on the test flight.

While the enhanced performance package improvement at sea level and standard conditions is notable, in hot and high conditions it is remarkable.

During all the turns the yaw damper and aileron-rudder interconnect made for smooth co-ordinated flight, and unlike the Learjets of old, no buffet was felt at 2g.

- Michael Gerzanics, *Flight International*, Feb 9th

<http://www.flightglobal.com/articles/2009/02/09/322207/flight-test-phenom-100-building-on-a-legacy.html>

AOPA PILOT

A Pushin' Phenom 100 – Thomas Horne flew the Phenom 100 prototype number one in mid-February and briefly reported on the test flight in AOPA Pilot Online's Reporting Points. A full article will appear in the next issue of AOPA Pilot. Visit Tom Horne's blog at: <http://blog.aopa.org/blog/?p=761>

Flying Magazine

Next Issue – Flying Magazine's next issue will feature Mac McLellan's flight test of the Phenom 100.

