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Executive Jets



PROGRESS REPORT



JULY 2009 – VOLUME 4 – ISSUE 8

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From the desk of Luís Carlos Affonso

I am thrilled to inform you that our customers now fly the Phenom 100 throughout the Americas, having logged close to 1,000 hours and 700 operating cycles. I am also glad to announce that the airplane was certified by EASA in Europe, last April, with no operational restrictions.

Customers report that they are enjoying the jet's comfort and performance. Our Customer Support organization is working closely with customers to support them as they begin their operations.

The Phenom 300 flight test campaign has stepped up the pace with four aircraft now forming the fleet that has accrued over 750 hours. Certification is on schedule for the fourth quarter of 2009.

Enjoy the news!

The Phenom Programs

Announced in May 2005, the Phenom 100 performed its first flight in July 2007, and was certified and delivered in December 2008. The Phenom 300, launched at the same time, took its first flight in April 2008, and is currently performing the certification campaign.

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.



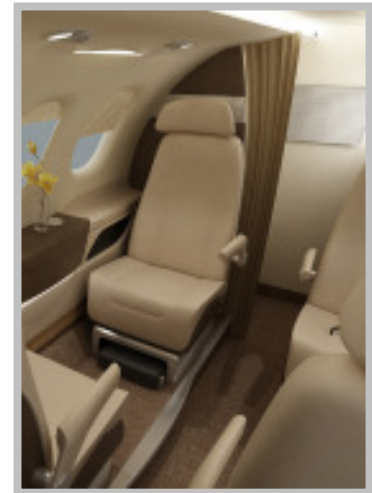
The Phenom 100 Program



Certification and Operation

EASA Certification – The Phenom 100 was certified, on April 24, by the European Aviation Safety Agency (EASA) for day and night operations – Visual Flight Rules (VFR) and Instrument Flight Rules (IFR), Reduced Vertical Separation Minimum (RVSM), and flight into known icing conditions.

New Seat Design – The new Phenom 100 seats offer an enhanced design to improve comfort and increase aisle width. They are also equipped with retractable armrests and provide partial fold-over capability for better access to the cabin and the lavatory. The seats will be available in the last quarter of 2009 for new deliveries and will be made available for retrofit at Embraer service centers at attractive commercial conditions.



Newly designed seat

Maturity Campaign – Designed for high utilization, in July, the fatigue tests for wing and fuselage of the Phenom 100 reached their first economical life cycle of 35,000 FC.

Improvements – In June, the Phenom 100 optional In Flight Entertainment (IFE) system was certified. The IFE system consists of a DVD/MP3 player installed in the wardrobe and connected to four speakers and one subwoofer. A special PCU (Passenger Control Unit) installed in the VIP position allows the passenger to control cabin temperature.

Enhancing flexibility for cold weather operations, the use of de-icing fluid type IV was recently approved for the Phenom 100. An aircraft can be approved to use up to four different types of de-icing fluid, which have different operating temperatures and viscosity. Type IV is the most viscous, and its approval also allows the use of the other three types of fluid.

As a worldwide sales success, the Phenom 100 has taken its certifications beyond ANAC, FAA and EASA. Recently, Panama, the Isle of Man (U.K.) and Venezuela have issued their own validations for the airplane.

In Operation – In July, the Phenom 100 fleet reached 1,000 flight hours of utilization in approximately 700 cycles. There are individual owners operating an average of up to 30 hours per month. During its trip to EBACE, from Houston, U.S., to Geneva, Switzerland, the Phenom 100 accomplished impressive speeds along challenging routes and was approved as a United States record for “speed over a recognized course”. The Phenom 100 joined the Phenom 300, the Legacy 600 and the Lineage 1000 at the EBACE static display, where the four models were exhibited together for the first time.



Phenom 300 second prototype



Crosswind mission in the USA



Cold soak tests

The Phenom 300 Program

Test Campaign

Flight Test Fleet – The aircraft comprising the test fleet, four of which are flying, include two fully instrumented and two equipped with basic interior and flight test instrumentation. The fifth aircraft, currently in final assembly, will have interior furnishings and will be used for function and reliability tests and in the maturity campaign. To date, the fleet has performed over 750 hours of flight tests.

First Prototype – The first Phenom 300 prototype (PP-XVI) was used to conduct the ground vibration, anti-ice calibration, undrainable fuel tests and the aerodynamic configuration finalization (flying qualities and performance tests). Artificial ice shapes were applied to this aircraft for tests and it performed natural ice tests, crosswind takeoff and landing tests, as well as stall tests. This prototype is currently finishing flutter and high-speed tests.

Second Prototype – The second Phenom 300 prototype (PP-XVJ) was used to conduct the following tests: water spray, engine fire detection, external noise initial evaluation, engine controllability initial evaluation, V_{mo} envelope opening, engine fire extinguishing, engine in-flight start, full flight simulator data collection, and fuel system tests. The autopilot tests are currently in progress.



High Intensity Radio Frequency Test

Third Prototype – The third Phenom 300 prototype (PP-XVK) has conducted flight control tests and is currently performing minimum control speed tests, as well as takeoff and landing performance.

Fourth Prototype – The fourth Phenom 300 prototype (PP-XVL) has conducted HIRF (High Intensity Radiated Field) tests, lightning tests, cold soak and external noise tests. It was presented at EBACE 2009, in Geneva, and is currently being used for validation of the maintenance plan.

Structural Tests – Bird strike tests were completed successfully. Now, static and fatigue tests are being carried out with test probes.



Structural Tests

Customer Support

In April, the Le Bourget Service Center marked its first anniversary of operations and in July it was certified by EASA for Line & Base Maintenance on the Phenom 100!



Phenom 100 at the Embraer Executive
Jets Service Center in Le Bourget

The Le Bourget facility is part of the worldwide Embraer Executive Jets service center network, which recently added two new sites: Nayak Aircraft Services in Cologne, Germany, and AdoAir Aviation Group in Johannesburg, South Africa. Nayak will be the first Maintenance, Repair and Overhaul (MRO) facility to serve Embraer's Phenom 100 and Phenom 300 in Germany, while AdoAir will provide routine checks and scheduled and unscheduled maintenance for the Legacy 600, Phenom 100 and Phenom 300.

Phenom 100 in the Media

Phenom 100 Test Flights and Articles

Pilot Reports – In addition to the cover stories illustrated below, pilot reports also appeared in Aviation International News and AeroMagazine (Brazil), and will appear in the upcoming issue of Air Business News Asia and Australian Aviation.

