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Executive Jets



PROGRESS REPORT



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From the desk of Luís Carlos Affonso

We are pleased to announce the Phenom 100's flight tests have progressed very well and the certification campaign is well under way. Our Customer Support organization is in full-scale preparation for the entry into service of the Phenom 100 in the second semester.

The Phenom 300 program also advances. The first jet is undergoing tests, the second Phenom 300 will fly soon and the third and fourth aircraft are already under construction.

Simultaneously to these advancements, we are excited to share with you the international design awards that the Phenom 100 and Phenom 300 have received, as well as the newly announced establishment of a new Executive Jets center in the United States.

Enjoy!

Luís Carlos Affonso

The Phenom Programs

Announced in May 2005, the Phenom 100 performed its first flight in July 2007 and four aircraft are currently in the Flight Test campaign. The Phenom 300 flew for the first time in April 2008. The jets are expected to enter into service in the second half of 2008 and in the second half of 2009, respectively.

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

Tests

Lightning Strike Test – The Phenom 100 has performed lightning strike tests at Embraer’s facilities in Nashville, U.S. The jet was conducted through a lightning simulator to confirm its endurance and protective capability against damages. The test was successful, presenting outstanding results.



The Phenom 100 at Embraer’s Nashville hangar alongside the Embraer E-Jets.



First image of the fifth Phenom 100 produced.



The Phenom 100 at Embraer’s Nashville hangar – preparing for the lightning strike test.

Test Campaign – The dedicated Phenom 100 fleet for certification and maturity campaigns has logged more than 1000 flight hours. After having succeeded in the cold soak and natural icing tests, the Phenom 100 jet performs the internal noise evaluation. This assessment is intended to confirm the low level of noise inside the cabin, one of the jet’s characteristics.

Certification Campaign – Tests regarding operations in airports located at high altitudes have just been concluded successfully. To date, the jets have accomplished crucial tests, which evaluated their behavior under flutter, ground vibration, extreme cold and ice conditions, besides performance and aerodynamics characteristics and flying qualities.



Icing test: the moment when the wing booth broke the ice.

The Phenom 300 Program

Assembly process and tests

Latest advances – The Phenom 300 assembly progresses at Embraer facilities. The third and fourth jets, also to be used in the certification and maturity campaigns, are already in pre-assembly.

The first jet – The aircraft flown in late April concluded the Ground Vibration Test (GVT) in early June. With positive results, the first Phenom 300 prepares for aerodynamic performance checks.



The fourth Phenom 300 in pre-assembly



The second Phenom 300 in final assembly.



The first flight of the Phenom 300 in late April



The Phenom 300 performing Ground Vibration Tests.

The Second Phenom 300 – The second jet, in final assembly, has just received its control surfaces, after concluding the electrical power-on test. This aircraft is being prepared for system integration evaluations, to happen in the next few weeks.

Man-Machine Interface – The third MMI meeting for the Phenom 300 happened at Embraer's headquarters last May, where members' validated the interior collections and options of the Phenom 300. The participants' feedback was very positive.

Phenom Awards

Awards



Gold medals – Embraer’s Phenom 100, Phenom 300 and Lineage 1000 jets recently won the IDEA/Brasil design award, which is the Brazilian version of the IDEA/USA Awards – one of the most prestigious design prizes in the world.

IDEA/Brasil Awards – Embraer competed in the Transportation area, which included Automobiles – Exterior and Interior; Boats and Aircraft – Exterior and Interior; Motorcycles; Recreational Vehicles; Bicycles; Concepts; and Prototypes.

Criteria – The judging was based on sustainability and design excellence, including aesthetics and harmony of form, aligned with innovation and benefits to users, customers, society, and the environment. With this prestigious award, Embraer was the manufacturer with the best performance, receiving a gold medal for each of its entrants.

Environment-friendly jets – By incorporating the latest airframe development, production and propulsion technologies, the clean-sheet design of the Phenom 100 and Phenom 300 results in environmentally-friendly jets, which produce, respectively, 33% and 25% less carbon dioxide emissions than older aircraft. The Phenom jets were developed by Embraer with such fully-digital design tools as CATIA V5, and their interiors created through a partnership with BMW DesignWorksUSA.

ICAO regulations – Moreover, the Phenom jets and the Lineage 1000 will exceed in their compliance with the latest International Civil Aviation Organization (ICAO) Stage IV noise regulations. Furthermore, they will also meet the demands of the most noise restrictive airports in the world, such as London City, U.K., and Ronald Reagan Washington National, U.S.A., providing an environmentally friendly option for neighboring communities.

More awards – The Phenom jets have received other design awards in the recent past, such as the IF Awards, in Germany, for the best product and interior, in 2006 and 2007, respectively, and the Good Design Awards, in China, for the best design, in 2006. In May 2008, the editors of U.S. magazine Robb Report chose the Phenom 100 as the Best of the Best Business Jet.



Training, maintenance and facilities



Phenom Full Flight Simulator



Full Flight Simulator – Developed through an Embraer and CAE joint-venture, the Phenom Full Flight Simulator (FFS) performed its “first flight”, simulating the jet operation characteristics. The device will be located at CAE’s training center in Dallas, Texas, U.S.

Phenom 100’s Maintenance – In May, every maintenance check required during the airplane’s first five years of operation was performed so that technical support personnel could gauge the amount of time necessary for each operation, validate the maintenance procedures and tooling, and gain valuable insights for use in service manuals and maintenance publications. Embraer Service Center mechanics participated in the process, joining Phenom maintenance instructors and support team members in gaining hands-on experience with the airplane.

New facility – Embraer announced in May that it plans to invest an estimated US\$ 50 million for the establishment of a new facility in the United States dedicated to its executive jets business. The new 150,000-square-foot state-of-the-art facility will house a final assembly line, the first for Embraer in the U.S. It will be capable of producing both the Phenom 100 and Phenom 300 executive jet models, as well as a paint shop and a delivery and customer design center.