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PROGRESS REPORT

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Luís Carlos Affonso, Embraer Executive Vice-President, Executive Jets

From the desk of Luís Carlos Affonso

In 2006 we made remarkable progress with the Phenom programs and we are off to a great start in 2007, with the first Phenom 100 already on the production line.

Continued investments in people, technology and industrial facilities have steadily advanced both programs. Over 800 engineers are engaged in the programs, with the support of our partners and suppliers, committed to delivering truly revolutionary jets.

I am thrilled to share with you first-hand images of the Phenom 100 prototype assembly, its components, rigs and the construction of its manufacturing facilities, for both main and final assembly, as well as completion and painting.

I also want to update you on the progress of our customer support initiatives. I have attached our most recent newsletter, which highlights the advances we've made to enhance our support to Legacy 600 customers and the preparations underway to fully support our Phenom and Lineage 1000 customers.

Enjoy!

Luís Carlos Affonso

The Phenom Programs

Announced in May 2005, the Phenom 100 and Phenom 300 programs are on schedule. The Phenom 100 first flight is expected to occur in mid-2007 and entry into service in 2008. The first flight of the Phenom 300 is planned for mid-2008 and entry into service in 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.



Phenom 100 Engine Flight Tests

Phenom 100 Program

Test Campaigns

Phenom 100 Engine Tests – Pratt & Whitney Canada has logged over 600 hours of tests with the Phenom 100 engine (PW617F), being 60 onboard its Boeing 720 test-bed aircraft. Currently, tests are being performed at the McKinley Climactic Lab in Eglin, Florida. The first two flight-worthy engines are expected to arrive at Embraer in early March, for installation on the prototype.



Prodigy Flight Deck

Prodigy Flight Deck – The avionics rig of the Phenom 100 Prodigy flight deck is fully functional at Embraer and integration tests are being conducted.

Flight Test Instruments – Integration tests of the flight test instruments rack for the Phenom 100 prototype are being carried out.

Manufacturing



Phenom 100 Flap Actuator

Flap Actuator – The flap actuator, specifically designed by Eaton for the Phenom 100, is one of the first components manufactured and delivered to the production line.

Automated riveting assembly machine – Heavy investments are being made in assembly line technology to achieve a high productivity rate and consistent quality. Production rates of the Phenom jets are expected to reach between 120 and 150 per year as of 2009. The main structures of the Phenom 100 prototype were built in the automated riveting machine.



Automated Riveting Assembly Machine



Phenom 100 Engine Inlet



Phenom 100 Pressure Bulkhead
In-house Composite Material Production

Phenom 100 Program – *continued*

Manufacturing

Engine Inlet – The first Phenom 100 engine inlet was manufactured by Meggitt.

Pressure Bulkhead – The Phenom 100 pressure bulkhead was manufactured at Embraer with composite material.

Fuselage sections – Assembly of the main Phenom 100 prototype fuselage sections is well advanced as shown below. The first Phenom 100 is being manufactured with the definitive production tooling, which are complete and ready.



Phenom 100 Fuselage Skin Assembly



Phenom 100 Program – *continued*

Manufacturing

Prototype assembly – Assembly of main fuselage sections and structures is being performed at the Botucatu plant and first-run results have proven full conformity of manufactured components to virtual product design, in CATIA V5 design. Assembly of the prototype is occurring at the main plant in São José dos Campos. Final assembly of the Phenom jets will take place in Gavião Peixoto.



Phenom 100 Prototype Assembly



Central Fuselage



Rear Fuselage



Forward Fuselage



Fuselage Assembly

Phenom 100 Program – *continued*

Manufacturing

Production Facilities Construction – Manufacturing facilities are now under construction in Gavião Peixoto for the final assembly, painting and completion of the Phenom jets.



Phenom Final Assembly Facility in Gavião Peixoto (GPX) - 130.000 sq. ft.

Phenom 300 Program

Engineering

Detailed Design and Certification Phase (DDCP) – The Phenom 300 program has completed the Joint Definition Phase and is in preparation for the first metal cut in the beginning of the second quarter.

Man Machine Interface (MMI) – In early March, Embraer will reconvene the advisory board that evaluated the man-machine interface of the Phenom 300 Prodigy flight deck last June. The engineering team will present the implementation of the recommendations by the board.

Test Campaigns

Phenom 300 Wind Tunnel Tests – The Phenom 300 has completed its schedule of wind tunnels tests and test results have confirmed projected aircraft performance. Additional wind tunnel tests will be performed with a partial wing model to further specify aileron control.



Phenom 300 Partial Wing Aileron Model

Embraer's Global Presence



Embraer São José dos Campos



São José dos Campos

Embraer Eugênio de Melo



São José dos Campos

Embraer Liebherr - ELEB



Joint Venture – São José dos Campos

Embraer Gavião Peixoto



Gavião Peixoto

Neiva



Botucatu