

**I - DOCUMENT EFFECTIVITY: PHENOM 100 AIRPLANES**

This bulletin is issued by Embraer Executive Flight Operations Support, as the need arises to quickly transmit technical and operational information. It is distributed to EMBRAER PHENOM 100 operators and to any personnel who need early advice of this information.

II - SUBJECT: OPERATIONAL ENVELOPE TEMPERATURE LIMITATION

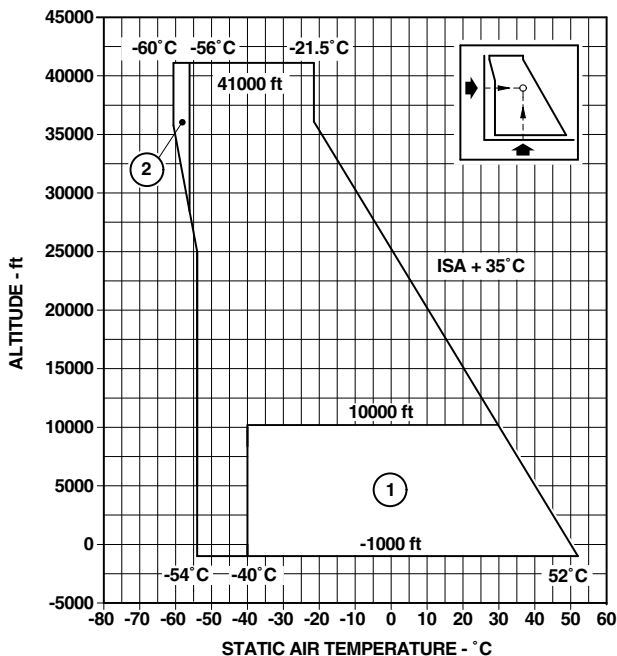
III - REASON: To inform operators of PHENOM 100 airplanes that operation under cold environments (less than -54°C Static Air Temperature) requires a minimum airspeed.

IV - BACKGROUND INFORMATION:

The airplane was designed for operation under temperatures down to -54°C Static Air Temperature (SAT). In order to operate under colder temperatures a minimum airspeed it is required to heat the surface and maintain the minimum skin temperature. The current PHENOM 100 Operational Envelope does not present this limitation. Because of that, the operational envelope has been modified to establish the area with restriction and the minimum airspeed required for each static air temperature range.

V - OPERATING INFORMATION:

The Authorities recently accepted a technical revision to the AFM and Embraer strongly recommends that operators apply it in advance as follows:

**REVISED CONTENT TO AFM-2655, AFM-2656, AND AFM-2657****BLOCK 2-10 ANAC, FAA, AND EASA****OPERATIONAL LIMITATIONS****OPERATIONAL ENVELOPE**

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- NOTE:** - Yaw damper must be engaged above 25000 ft, and above 250 KIAS.
- In the event of a landing below -40°C, report to the maintenance personnel.
 - Operations in Region 2 are limited to a minimum airspeed according to the following information.



ADDED CONTENT TO AFM-2655, AFM-2656, AND AFM-2657

BLOCK 2-10 ANAC, FAA, AND EASA

MINIMUM OPERATION SPEED

The airplane is allowed to operate in cold environments (Region 2) respecting a Minimum Operation Speed of Mach 0.40.

CAUTION: IN CASE A DRIFTDOWN IS REQUIRED, MAINTAIN MINIMUM OPERATION SPEED UNTIL AIRPLANE IS OUTSIDE REGION 2 AND THEN PERFORM DRIFTDOWN.

CAUTION: IN CASE OF AN EMERGENCY OR ABNORMAL PROCEDURE THAT REQUIRES A REDUCTION OF THE SPEED BELOW THE MINIMUM OPERATION SPEED REQUIRED WHEN FLYING INSIDE REGION 2, USE THE SPEED INDICATED BY THE ASSOCIATED PROCEDURE AND DESCENT UNTIL AIRPLANE EXITS REGION 2.

**ADDED CONTENT TO AFM-2655, AFM-2656, AND AFM-2657****BLOCK 5-02 ANAC, FAA, AND EASA****SOFTWARE CONFIGURATION**

NOTE: For operations in Region 2 of the Operational Envelope, driftdown must be calculated by setting the Minimum Operation Speed as the "given speed" and using SAT (OAT) as the temperature unit.

VI - TECHNICAL PUBLICATION INFORMATION:

The Airplane Flight Manuals are already in the publishing cycle to incorporate this limitation as follows:

- AFM-2655 (ANAC) Revision 29;
- AFM-2656 (FAA) Revision 24; and
- AFM-2657 (EASA) Revision 19.

The other Operational Manuals will be updated accordingly.