EMBRAER PHENOM 300 Model Guide

EMBRAER PHENOM 300 is a turbofan jet, registered as the EMB-505. Registry data for the whole family shows up to 9 passengers, up to 1800 nm range, up to 450 kt cruise, up to 45000 ft service ceiling and up to 7900 kg MTOW. Those are family maximums, not figures for one aircraft. Embraer's manual says the type can be operated single pilot.

KEY TAKEAWAYS

- Family-level registry maximums: up to 9 passengers, 1800 nm range, 450 kt cruise, 45000 ft ceiling. Confirm figures for the specific aircraft.
- Embraer's flight operations manual says the Phenom 100 and 300 can be legally and safely operated single pilot.
- SB505-25-0046 adds cabin cabinet reinforcements. Embraer recommends doing it at the next 60 MO maintenance package.
- Check by serial number whether the bulletin applies. SN 50500601 and on may have an equivalent modification factory-incorporated as an option.

CABIN STRUCTURE SERVICE BULLETIN

SB505-25-0046 (Rev 01, May 08, 2023) installs reinforcements on the RH refreshment center and LH forward cabinet. It also replaces rivets in the RH refreshment center floor support. ANAC approved it. Modification labor is estimated at 6.0 to 14.0 man-hours depending on serial-number group, plus access opening, closing and test.

DEMONSTRATION FLIGHT RULES

Embraer's standard executive demo uses 2 demo pilots, typically a local 45 minute flight. Pilot demos on the Phenom 100/300 need a runway at least 75 feet (23 meters) wide. Takeoff and landing figures carry a 1.25 factor. Stalls, in-flight shutdowns, V1 cuts and single engine go-arounds are prohibited.

WHAT TO VERIFY BEFORE BUYING

Ask whether SB505-25-0046 has been done on the aircraft's serial number, or whether it is still open. Ask for the matching logbook and weight-and-balance entries. The bulletin adds +0.858 to +2.416 lb of basic weight by group. Warranty labor cover runs 60 months from the bulletin issue date.

SAFETY NOTES

- Pilot demonstrations should not be flown at night, and night circle-to-land approaches are prohibited.
- Touch-and-go landings during demos need 2,000 ft added to the calculated landing distance.
- An open SB505-25-0046 means the RH refreshment center and LH forward cabinet lack the added structural reinforcements.

AI-aggregated guide for the EMBRAER PHENOM 300 · sources: FLIGHT OPERATIONS MANUAL (#102831) · SB505-25-0046-REV.01 - EQUIPMENT/FURNISHINGS (#100759) · generated 2026-11-24 ·
Reference only, not for flight. Check the original documents before relying on this guide.