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Docket Management System
U. S. Department of Transportation
Room Plaza 401
400 Seventh Street, SW
Washington, DC 20590-0001
EUA

Subject: FAR 125/135 Regulatory Review Request for Comments; Docket Number FAA-2002-13923

Gentlemen:

This is in reply to the request for comments published in the Federal Register on February 3, 2003, requesting proposals from interested parties to the part 125/135 Aviation Rulemaking Committee for changes to 14 CFR parts 125 and 135. Embraer, as a manufacturer of several aircraft models that are eligible for these operations, submits for consideration the following:

FAR 135 Weight Limits

FAR 119 currently limits certain operations under FAR 135 to airplanes whose payload is less than 7,500 lbs. Aircraft with greater payloads in commercial operation must operate in accordance with FAR 121.

At the time weight limits for FAR 135 were first promulgated, the only aircraft that had payloads higher than 7,500 lbs. were significantly larger airplanes whose operation clearly belonged in FAR 121. Given the disparity in load carrying capability the 7,500 lb value was a logical discriminant at that time.

Since that time, the development of powerful and reliable turbine engines has resulted in airplane models that have payloads above 7,500 lbs. These airplanes, principally turbopropeller airplanes equipped with modern avionics and two pilot flight crews, have a safety record significantly better than the earlier generations of smaller airplanes around which the 7,500 lb limit was based. The committee should consider changing the current payload limit so that FAR135 operators can take advantage of the safety advantages provided by more modern aircraft without having to also be penalized financially by a payload limit that has been overtaken by the advance of technology.

Oxygen Requirements of FAR 135.157

FAR 135.157 contains oxygen capacity requirements for pressurized airplanes, including the requirements of FAR 135.157(b)(ii) that, in the event of cabin decompression, that one hour of passenger oxygen be provided, unless the aircraft can descend below 15,000 feet in less than four minutes, in which case only 30 minutes is necessary.

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Even for jet aircraft operating over non-mountainous terrain that can descend quickly and easily to lower altitudes where ambient pressure is sufficient to prevent hypoxia, a minimum of 30 minutes of passenger oxygen is required.

This requirement is contrasted with that in FAR 121.333(e)(2) which has similar requirements, except that the minimum oxygen supply requirement is ten minutes.

It is not clear why there are two different oxygen capacity requirements when the exposure to high cabin altitude in the event of a cabin depressurization is the same. Both requirements are objectively structured around cruise altitude (both before and after the pressurization failure) and descent capability, but the FAR 135 requirement requires a much higher minimum capacity for the same passenger exposure

This difference in requirements has required operators of Embraer aircraft that have moved into FAR 135 operation to modify their airplanes to replace the oxygen canister systems that have sufficient endurance to meet the FAR 121.333 requirement, with a higher capacity gaseous system that meets FAR 135.157(b). Since there is no design or operational reason apparent to Embraer for the difference, we request that the committee review the development of these two requirements and revise FAR 135.157 to more closely match that of FAR 121.333 unless the committee determines that safety considerations justify otherwise.

Embraer appreciates this opportunity to provide proposals for consideration by the committee. If there is any further assistance that we may be able to provide, please contact the undersigned.

Sincerely,

Paulo C. Olenscki
Certification Manager