



U.S. Department
of Transportation
**Federal Aviation
Administration**

Transport Airplane Directorate
1601 Lind Ave, SW.
Renton, Washington 98057-3356

Exemption No. 9779A
Regulatory Docket No. FAA-2007-0323

September 15, 2009

J. B. Zundell
Lead Project Administrator
Product & Retrofit Projects
The Boeing Company
P.O. Box 3707, M/C 67-LR
Seattle, WA 98124-2207

Dear J. B. Zundell,

This letter is to inform you that we have granted your petition to amend Exemption No. 9779. It explains the basis for our decision and gives you the conditions and limitations for this amended exemption.

The Basis for Our Decision

By letter dated August 14, 2009, you petitioned the Federal Aviation Administration (FAA), on behalf of The Boeing Company, to amend Exemption No. 9779 to include relief from § 25.1447(c)(1) of Title 14, Code of Federal Regulations (14 CFR) for the supernumerary compartment. The proposed amended exemption, if granted would allow operators of Boeing Model 777F airplanes to have flightcrew-style quick-donning oxygen masks for the supernumerary seats. This mask style does not fulfill the requirement for automatic presentation of oxygen masks required by § 25.1447(c)(1).

We have permitted the use of non-automatically presented oxygen masks in lieu of automatically presented oxygen masks in several exemptions. The most recent exemption is No. 9696 for the Boeing 767-300 converted freighter. Section 25.1447(c)(1) requires automatic presentation of the oxygen dispensing units. However, the supernumeraries in the supernumerary compartment will not have this indication that they need to don oxygen masks. The petitioner has proposed an

automatically activated aural and visual alert system to notify the supernumeraries to don oxygen masks. We find that the proposed system provides an acceptable level of safety, as long as the alert is present and immediately recognizable throughout the accessible areas of the supernumerary compartment. As a backup to the automated alert system the flightcrew must be able to manually activate the alerts. Also, the proposed supernumerary training and briefing for the aural and visual alert system and the oxygen system is required to maintain this acceptable level of safety.

Section 25.1447(c)(1) also requires that the number of oxygen masks exceed the number of seats by at least 10%. The intent is that these masks will be used by flight attendants and children sitting on passengers' laps. Since neither will be on-board the airplane, installing 10% extra oxygen masks is not required.

We also want to clarify that the supernumerary seats are located aft of the flight deck, not in the flight deck, as was noted in the *FAA's Analysis* section of Exemption No. 9779.

The FAA has determined that good cause exists for not publishing a summary of the petition in the *Federal Register*. The requested amendment to the exemption would not set a precedent, and any delay in acting on this petition would be detrimental to the owners and operators of the Boeing Model 777F airplane.

Our Decision

The FAA has determined that the justification to amend Exemption No. 9779 to include the requested relief is in the public interest for the reasons stated by the petitioner. Therefore, under the authority provided by 49 U.S.C. §§ 40113 and 44701, which the FAA Administrator has delegated to me, I grant your petition to amend Exemption No. 9779. I also add the following provisions to read as follows:

13. For those supernumerary compartments with flightcrew-style quick-donning oxygen masks installed above the supernumerary seats, the following additional limitations and conditions apply. Also, the conditions in 13.c and 13.f, and the preflight briefings required by 13.e, must be documented in the Limitations Section of the Airplane Flight Manual:

- a. Supplemental oxygen equipment with a mask connected to it must be located so each occupant can put on the mask and activate the oxygen flow while seated.
- b. The unit must provide an indication to the user that oxygen is flowing.

- c. The supernumeraries must be trained in the use of the oxygen units. The supernumeraries must also be trained in making the determination whether oxygen is being delivered to the dispensing units.
- d. The oxygen units must be sized adequately for continuous and uninterrupted use during worst-case flight duration following decompression.
- e. Based on the petitioner's proposal, an automatically activated aural and visual decompression alert, with flightcrew-activated manual backup, must be provided and immediately recognizable in accessible areas of the supernumerary compartment. This alert will notify supernumeraries when to return to their seats and don the oxygen units. The pre-flight briefing must include sounding the alert, the meaning of the alert, and the response to the alert (i.e., procedures for donning the masks and activating the flow of oxygen).
- f. Based on the petitioner's proposal, a placard must be installed near the warning horn (aural alert) and the red warning light (visual alert) that indicates the following information: The location of the oxygen masks and direction to don the oxygen masks immediately if the aural and visual alerts activate. The location and meaning of this placard must be included in the pre-flight briefing.

The Effect of Our Decision

Our decision amends Exemption No. 9779 by adding provision No. 13. All other conditions and provisions of Exemption No. 9779 remain in effect. This letter must be attached to, and is a part of, Exemption No. 9779.

Sincerely,

Signed by Ali Bahrami

Ali Bahrami
Manager, Transport Airplane Directorate
Aircraft Certification Service