

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98057-3356

In the matter of the petition of

Greenpoint Technologies, Inc.

for an exemption from paragraph 7(a) of
Special Federal Aviation Regulation
No. 109 and § 25.807(f)(4) of Title 14,
Code of Federal Regulations

Regulatory Docket No. FAA-2015-0668

GRANT OF EXEMPTION

By letter dated March 13, 2015, Ms. Barbara Baillie, Senior Certification Engineer, Greenpoint Technologies, Inc., 4600 Carillon Point, Kirkland, Washington, 98033, petitioned the Federal Aviation Administration (FAA) for an exemption from the requirements of paragraph 7(a) of Special Federal Aviation Regulation (SFAR) No. 109 and § 25.807(f)(4) of Title 14, Code of Federal Regulations (14 CFR). This exemption, if granted, would permit relief from the requirements related to the distance between passenger exits. The proposed exemption is specifically for the installation of an executive interior on a Boeing Model 787-8 airplane, serial number 35309, designated as “private use, not for hire, not for common carriage.”

The petitioner requests relief from the following regulation(s):

Paragraph 7(a) of SFAR 109, requires, in pertinent part, that each passenger seat must be located within 30 feet from the nearest exit on each side of the fuselage, in the event that exits are more than 60 feet apart.

Section 25.807(f)(4), Amendment 25-114, requires, in pertinent part, that no passenger emergency exit shall be more than 60 feet from any adjacent passenger emergency exit on the same side of the same deck of the fuselage.

The petitioner supports its request with the following information:

This section quotes the relevant information from the petitioner's request, with minor edits for clarity. The complete petition is available at the Department of Transportation's Federal Docket Management System, on the Internet at <http://regulations.gov>, in Docket No. FAA-2015-0668.

Background

The Boeing Model 787-8 project airplane is intended to be a VIP executive aircraft; modified under United States registration (N28MS). Greenpoint is contracted to design, install, and certify an executive interior in a Boeing Model 787-8 per customer specifications. Supplemental type certification is sought under FAA project #ST12319SE-T. The certification basis for the project is defined in Type Certificate Data Sheet T00021SE and includes 14 CFR part 25 through Amendment 25-120 and higher amendments for certain regulations as contained in the project specific certification plan, Greenpoint Document G1350-CP-01, Revision D, dated January 23, 2015, and accepted by FAA letter 150S-15-20, dated February 4, 2015. Voluntary compliance to the requirements contained in SFAR 109 has been elected.

Discussion

The airplane was delivered from Boeing in a zero passenger configuration with a valid FAA Certificate of Airworthiness. The proposed interior installation includes a pilot lounge just aft of the flight deck, a bedroom including closet and lavatory, a passenger lounge, conference, and lavatory areas, as well as traditional commercial type seating aft half the Door 3 area. The Door 2 Right has been deactivated by means of an FAA approved Boeing Service Bulletin to accommodate the bedroom area. Maximum passenger count will be limited to 40 occupants for taxi, takeoff, or landing (TTOL): 4 seats certified for TTOL in the lounge, 12 seats certified for TTOL in the conference area, and 24 seats certified for TTOL in the commercial type areas of the cabin aft of Door 3.

The airplane will be operated as a private use, not for hire, not for common carriage airplane. These types of VIP interiors require a high level of privacy and security that is normally not available in airline-style interiors. This results in increased focus on maintaining control and safety of the occupants as well as greater understanding and general awareness by the occupants of the safety risks and existing design features in the interior that mitigate these.

Part 25 of 14 CFR governs type design certification requirements for transport category airplanes. SFAR 109 amended these standards for transport category airplanes by adding new interior criteria for operators of private use, not for hire, not for common carriage airplanes such as the project airplane. The SFAR provides alternative criteria for transport category airplanes that are operated for private use while continuing to provide an acceptable level of safety for those operators. Certification to these alternate standards is planned except that for the alternate requirement of paragraph 7(a) of SFAR 109 for the 4 seats in the lounge for which relief is requested.

Paragraph 7 of SFAR 109 was issued as an alternative criterion to the 60 foot rule to be consistent with FAA policy and to maintain the intent of § 25.807(f)(4) while also allowing deactivation of exits, which is common in VIP interior installations. In coming up with the specific requirement that a maximum of 30 feet is allowed between a passenger seat and exits on both sides of the airplane, the FAA has stated there were different approaches that would have been possible, but none were considered or allowed for in the final rule. Given that VIP interiors vary greatly in terms of passenger capacity and layout, it is reasonable that a different approach to meet the intent of this one aspect of the alternative criterion found in SFAR 109 is feasible.

The project airplane is a unique interior with a 40 passenger capacity in which 4 of the seats are installed a few feet beyond the 30 foot distance to an exit on one side of the airplane only. These 4 seats are 4 of only 16 seats to be certified for TTOL in this compartment. This compartment is the only one with seats certified for TTOL forward of Door 3 on the airplane. The seats are situated in the forward section of the compartment on a main aisle with a direct path to exits in two directions. Deactivation of the Door 2 right side exit is the reason these seats fall outside strict compliance to the SFAR 109, paragraph 7(a) criteria. However, the seats are installed within 37 feet of exits on the right side and left side at Door 3, and 21 feet of the remaining exit on the left of the airplane at Door 2. There are only 12 other passengers in this compartment that would be competing for these 3 exits in an emergency egress situation. The remaining 24 passengers will be seated aft of the Door 3 area with access to exits at Doors 3 and 4 on both sides of the airplane. Given the limited capacity, and access to the exits for this particular VIP layout, an alternative approach than is offered by existing paragraph 7(a) of SFAR 109 for the 60 foot rule is reasonable and maintains the original intent of the rule when applied to this VIP interior.

Basis for Exemption

The FAA has made adjustments to regulatory requirements based on specific design and operational factors numerous times in the past. Additionally, SFAR 109 provides alternative criteria for transport category airplanes that are operated for private use while continuing to provide an acceptable level of safety for those operations. This exemption will have no adverse impact on safety for the following reasons:

- Relief to the distance criterion for the 4 seats as proposed maintains the spirit of the original requirement, § 25.807(f)(4), and more specifically to the SFAR 109 alternate criteria of paragraph 7(a), because the limited capacity of the room, the seat positions, and access to the exits for the project airplane effectively eliminates crowding for the affected passengers which would delay evacuation and is the basis, in part, for the requirement.
- The request is an alternative approach to the 60 foot rule not considered previously by the FAA which maintains the intent of the alternative included in SFAR 109, while taking into consideration the project airplane's unique layout.

Granting this exemption would be in the public interest for the following reasons:

- VIP aircraft are used by Heads-of-State and Diplomatic Persons. Developing and maintaining positive relations with the operators of these aircraft benefits the US economy in terms of trade and balance of power.
- The use of US design and manufacture of aircraft and interiors such as this one develops and maintains the worldwide positive image and influence currently enjoyed by the US Aerospace Industry. Consistency in regulations and design requirements at and after contract award affects competitiveness; and significant changes after the time of contract places the US industry in a significantly lowered position to foreign industry. Future sales depend on potential customers worldwide finding the US certification process dependable and reasonable, so alternate requirements that provide an acceptable level of safety is desirable.
- Granting of exemptions that meet the unique needs of the VIP modifier fosters the US aviation industry.

Privilege of this Exemption Outside the United States

In accordance with § 11.81(h), Greenpoint Technologies requests that the privileges of this exemption be extended outside of the United States. This extension of privileges is necessary because the project airplane will be operated a substantial amount of time outside of the United States.

Federal Register publication

The FAA has determined that good cause exists for waiving the requirement for *Federal Register* publication for public comment because the exemption, if granted, would not set a precedent; and any delay in acting on this petition would be detrimental to Greenpoint Technologies, Inc.

The FAA's Analysis

The FAA considers that granting this petition is in the public interest for the reasons stated by the petitioner and because the FAA is directed to take into account the type of operation when establishing standards under Title 49 of the United States Code (49 U.S.C. 44701(d)).

As more transport category airplanes have been configured (or reconfigured) for private use, the FAA has given considerable attention to the issue of appropriate regulation of such airplanes. Some of the current regulations governing design certification of transport category airplanes are not compatible with private use of such airplanes. Because of this, we have received a number of petitions for exemption from certain regulations. We have granted such exemptions when we find that to do so is the public interest and when it does not adversely affect the level of safety provided by the regulations. We published *Special Requirements for Private Use Transport Category Airplanes*, SFAR 109, which significantly reduces the need for case-by-case review of individual petitions for exemption for private-use airplanes within the limitation of SFAR 109.

In this case, while the provisions of paragraph 7(a) of SFAR 109 provide relief from § 25.807(f)(4), they could also actually discourage the retention of exits in airplanes that have low passenger capacities.

Our analysis of this petition considered the following design features proposed by the petitioner:

An airplane with 40 passengers would technically require no more than 4 exits (2 on each side) and those exits could be significantly smaller than the exits provided in the Boeing Model 787. To meet the literal requirements of the SFAR, it would be possible to deactivate an additional three exits and concentrate the seats occupiable for takeoff and landing between the remaining four exits. It would also be possible to reduce access to those exits, such that their evacuation rate was reduced to the capability of smaller exits, as would be required by the regulations for 40 passengers.

The petitioner has deactivated a single exit of a pair but has retained the remaining 7 Type A exits. This provides an excellent evacuation capability for the number of passengers on the airplane. Although there are 4 passengers whose distance to an exit on one side of the airplane exceeds 30 feet, the FAA regards this as being outweighed by the presence of 7 Type A exits, as opposed to the legally permissible 4 smaller exits. That is, the evacuation capability provided is arguably better than would be obtained with literal compliance at the regulatory minimum. Therefore, a grant of exemption is warranted in this case.

The FAA does, however, regard distance to exits as an important factor in evacuation and there is no intention to remove such requirements, nor should this grant of exemption be interpreted as a change in the FAA's position. The distance to an exit is one factor of many that contribute to the overall evacuation capability, with the quantity and type of exits being the most significant. SFAR 109 was intended to make the requirement more flexible, considering the nature of private use, not for common carriage operations, and to a large extent, has done that. Nevertheless, as evidenced by this petition, there are scenarios the SFAR does not account for, where the SFAR may not be met, but the level of safety is not compromised.

The FAA's decision

In consideration of the foregoing, I find that a grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701 delegated to me by the Administrator, I grant Greenpoint Technologies, Inc., an exemption from 14 CFR 25.807(f)(4) and paragraph 7(a) of Special Federal Aviation Regulation No. 109. The exemption is granted to the extent necessary to allow Greenpoint Technologies, Inc., to install an executive interior on private, not-for-hire, not-for-common-carriage, Boeing Model 787-8 airplane, serial number 35309, with the Number 2 right-hand door deactivated. Specifically, the exemption allows relief from the requirements that exits be within 60 feet of each other and that passenger seats be within 30 feet of an exit on each side of the airplane.

This exemption is subject to the following condition. This condition must be documented in the limitations section of the airplane flight manual.

The airplane must not be operated for hire or offered for common carriage. This provision does not preclude the operator from receiving remuneration to the extent consistent with 14 CFR parts 125 and 91, subpart F, as applicable.

Issued in Renton, Washington, on July 14, 2015.

/s/

Suzanne Masterson
Acting Manager, Transport Airplane Directorate
Aircraft Certification Service