

Exemption No. 7946

**UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056**

In the matter of the petition of

Gulfstream Aerospace Corporation

for an exemption from § 25.813(e) of Title 14,
Code of Federal Regulations

**Regulatory Docket No.
FAA-2002-12904**

PARTIAL GRANT OF EXEMPTION

By letter dated July 17, 2002 (A&C-FAA-02-230), Mr. Richard J. Trusis, Director, Airworthiness & Certification and Data Management, Gulfstream Aerospace Corporation, P.O. Box 2206, Savannah, Georgia 31402-2206, petitioned for an exemption on behalf of Gulfstream Aerospace Corporation from the requirements of § 25.813(e) of Title 14, Code of Federal Regulations (14 CFR). The petitioner has requested the exemption in order to permit the installation of interior doors between passenger compartments on Gulfstream Aerospace Corporation Model GV-SP series airplanes.

Sections of the Federal Aviation Regulations (FAR) Affected

Section 25.813(e) prohibits the installation of doors in any partition between passenger compartments.

Petitioner's Supportive Information

The petitioner's supportive information follows.

“The GV-SP aircraft is designed to the requirements of 14 CFR Part 25, for Transport Category airplanes. These rules are addressed basically to Transport Category airplanes that are used for the carriage of fare paying passengers from the general public, and must also consider aircraft with seating capacities of up to 500 passengers. In contrast, the GV-SP aircraft will be Type Certified for a maximum of 19 passengers and will be outfitted exclusively for corporate use (private or non-scheduled commercial). The 14 CFR part 25 rules do not make any distinction between the commercial Transport

Category aircraft used in airline operations and the aircraft specifically used for corporate operations.

“Gulfstream Aerospace contends that airplanes specifically designed for corporate service, whether private or commercial, should be eligible for the acceptance by exemption of cabin features and facilities which do not comply with the full requirements of FAR part 25, provided a similar level of safety is provided and can be demonstrated. The corporate fleet utilizing aircraft certified in the Transport Category worldwide has now grown to a point where it is contended that the certification agencies need to consider new revised design rules for aircraft involved in this class of operation.

“Gulfstream aircraft are specifically designed and outfitted for corporate operation and normally carry passengers familiar with flying and familiar with Gulfstream aircraft. Also, unlike an airliner, the crew of a corporate Gulfstream has daily contact with their passengers, which has a positive influence on communicating safety issues. In addition to this, one crew who is intimately knowledgeable of the specific aircraft type normally operates these aircraft. Therefore, the combination of these factors unique to corporate operation provides an initial level of safety which cannot be achieved in an airliner.

“Customers who purchase and operate Gulfstream aircraft consider privacy to be of paramount importance. In fact the needs of the customer, whether an individual, corporation, or government, often demand privacy. Therefore, it is important that a portion of the cabin be configured with private room areas that will prevent personnel who are not seated within the room from hearing conversations taking place inside the room. In the case of a business where associates may be accompanying the owner, it is imperative that accommodations be made in the cabin for very private meetings. The only conceivable method of providing such privacy is through the use of separate rooms consisting of doors within the passenger cabin. In nearly every operation of a business airplane such as this, the requirements for doors between different areas of the airplane are essential to its operation. When a privacy area is created within the passenger cabin, the doors separating the private area from the rest of the cabin will be located between passenger compartments.

“Additional safety features

“1. The cabin of the GV-SP is approximately 7.5 feet wide. It is necessary to divide the cabin full width laterally to produce a private area, because a side corridor is impractical. The doors to be installed would be sliding pocket doors retracting into the transverse partition(s) on either/both side(s) of the aircraft. The door will be designed to be frangible, with features that will allow a 5th percentile female to break the doors open in case of an emergency, resulting in an aperture large enough to allow for a 95th percentile male to escape, in addition to having blowout capability for decompression.

“2. The door will be placarded to be latched open during taxi, take-off, and landing.

“3. The door will feature a dual locking mechanism. The locking mechanism design would minimize the probability of the door unlocking due to fuselage distortion in an

emergency landing, and would be capable of supporting the inertia loads specified in 14 CFR 25.561.

“4. An amber "door closed" advisory light will be provided in the instrument panel. The light will automatically extinguish with gear retraction, remain off during flight, and illuminate with gear down if the partition door was not latched open. This indication would provide the crew with enough time to set the cabin doors for landing. As an optional configuration, the advisory light function may be incorporated as an amber CAS message reading "Mid Cabin Door Closed." Functionality will remain unchanged.

“5. Bulkhead emergency exit sign(s) will be installed to ensure that the level of passenger guidance required to find an exit will be provided.

“6. The passenger briefing card and emergency video will contain information describing the door action, the door emergency features, and instructions for latching the door open.

“7. Interior outfitters will be provided with an Interior Certification Requirements Document to ensure that they are aware of the special design requirements with which they must comply to be eligible to use this exemption.

“Effect of the exemption

“The safety features described above are to ensure there is a clear path through the partition to an emergency exit. However, even if some extreme condition should result in a door being closed or partially closed after an accident, there are simple means to get through the door to reach the exit(s). The basic issues of a passenger finding and reaching an exit in an emergency are addressed by the above additional safety features and by the existing safety parameters inherent in corporate operation. For this reason it is argued that the exemption as requested would provide a level of safety for the GV-SP passengers which would be equal to that required for airline airplanes.”

Petitioner’s Public Interest Statement

“Gulfstream Aerospace Corporation designs, develops, manufactures, markets, and services ... business jet aircraft to an international market. Gulfstream's ... position in the global business jet market is due to the efforts of its nearly eight thousand employees in the manufacturing plants, completion centers, and service centers across North America. The corporation utilizes numerous products, such as avionics and environmental control systems, from scores of suppliers located throughout the United States. Gulfstream competes for new business all over the world. And although the current world economy has slowed in comparison to previous years, the corporate aircraft market is expected to grow. This exemption will directly impact the long-range utility of the GV-SP aircraft, thereby having a direct effect on GV-SP sales. The manufacture, completion, and support of Gulfstream aircraft would aid in the stabilization of the job market as well as the growth of the American economy, which is certainly in the interest of the public.

“Private areas in corporate aircraft are being requested by an increasing number of prospective aircraft operators. These operators compare the GV-SP with products of European and other foreign aircraft manufacturers who are able to offer this feature. This differential creates an unfair competitive edge in this market. The exemption as proposed above is in essence only an alternative method of achieving an appropriate level of safety, while at the same time providing features attractive to prospective purchasers.”

Notice and Public Procedure Provided

On August 16, 2002, the FAA published notice of the petition for exemption in the Federal Register (67 FR 53640) and requested comments from the public. No comments were received in response to the notice.

FAA’s Analysis of the Petition

There are differences between commercial and private use operation (whether by an individual or a corporation) of transport category airplanes that merit consideration of the appropriate level of safety that is warranted. The FAA is giving great attention to the issues raised when these airplanes are operated in private use. In recognizing the differences between commercial and private use operations, the FAA has identified several regulatory requirements, including the subject of this petition, that may need to be revised to address the safety issues revealed by these differences. The FAA is reviewing the adequacy of the current regulations and in the future may propose revisions to the requirements, where appropriate.

The current regulations allow the installation of interior doors, provided that passengers cannot be seated on both sides of the door during takeoff and landing. The FAA has safety concerns regarding doors that are located between passengers and exits. We have proposed to prohibit such installations in future designs, as detailed in Notice of Proposed Rulemaking 96-9 (61 FR 38551, July 24, 1996). However, until the regulations are revised, such doors may continue to be installed without the need to process a petition for exemption.

We have recently issued exemptions for private use airplanes that would permit installation of doors between passenger compartments, provided that certain limitations are met. The petitioner has proposed several of these limitations as part of their petition.

The approach to flight deck annunciation proposed by the petitioner is generally acceptable; however, appropriate procedures must be established to ensure that the flight crew checks the advisory light or crew alerting system (CAS) message.

When doors are installed between passenger compartments, it must be possible for persons on either side of the door to unlock or unlatch the door without the use of tools. This is similar to the situation where a lavatory door can be unlocked from the outside by crewmembers without special tools. This limitation will provide ready access to compartments on both sides of the door during in-flight emergencies (e.g., fire, incapacitated person behind locked door, etc.) and assist in ensuring ready access to all emergency exits.

The petitioner has indicated that the Model GV-SP series airplane will be operated in private and non-scheduled commercial use. All previous exemptions from § 25.813(e) have been granted based on public interest having been found for private use operations only. We find that it is not in the public interest to exempt the Model GV-SP series airplane from § 25.813(e) for non-private use operations. Such operators generally have a duty to provide service with the highest possible degree of safety in the public interest. As a result, § 25.813(e) must be met for non-private use operations. This determination is consistent with all similar exemptions granted previously. It should be noted that § 25.813(e) was adopted at amendment level 25-1, dated March 3, 1965, and is in the certification basis of all airplanes considered competitors to the Model GV-SP series airplane.

Although a grant of exemption for private use airplanes benefits the petitioner as a private entity, with the traveling public excluded from any apparent direct benefit, the FAA considers that the public at large does have a potential to benefit because it is inherently in the public interest to allow unencumbered commerce and freedom of choice between buyers and sellers when certain conditions are met. Since a partial grant of exemption will not have detrimental safety implications on the public at large, and since the other limitations associated with this exemption minimize the reduction in the level of safety, the FAA finds that permitting the desired marketplace flexibility constitutes sufficient public interest to allow certification of Model GV-SP series airplanes for private use operations with doors that separate passenger compartments.

Finally, regarding the type of operation permitted under the terms of this exemption, it should be noted that, whether or not operations are scheduled, this exemption does not permit fares to be collected in exchange for transportation. It is also the intent of this exemption that the airplane is not used to transport the general public (common carriage) even if fares are not collected. This exemption does not restrict one party from collecting fees from another party, as long as the airplane is operated for private use. That is, the airplane's owner may lease the airplane to another party, who in turn operates the airplane.

The Partial Grant of Exemption

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest and will not adversely affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, Gulfstream Aerospace Corporation is hereby granted a partial exemption from § 25.813(e). This partial exemption is granted to the extent necessary to allow installation of interior doors between passenger compartments on the Model GV-SP series airplane, and is subject to the provisions below. Provisions 1 and 3 must be documented as operating limitations in the limitations section of the Airplane Flight Manual.

1. 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 part 125 and 14 CFR part 91, subpart F, as applicable.
2. Each door between passenger compartments must be frangible.

3. Each door between passenger compartments must have a means to signal to the flightcrew when the door is closed during takeoff and landing. Appropriate procedures/limitations must be established to ensure that takeoff and landing is prohibited when any such door is not in the proper takeoff and landing configuration.
4. Each door between passenger compartments must have dual means to retain it in the open position, each of which must be capable of withstanding the inertia loads specified in 14 CFR 25.561.
5. Doors installed across a longitudinal aisle must translate laterally to open and close.
6. When doors are installed between passenger compartments, it must be possible for persons on either side of the door to unlock or unlatch the door without the use of tools.

Issued in Renton, Washington, on January 9, 2003.

/s/Ali Bahrami
Ali Bahrami
Acting Manager
Transport Airplane Directorate
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