

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

In the matter of the petition of

**Dassault Aviation**

for an exemption from §§ 91.613(b) and  
135.170(c) of Title 14, Code of Federal  
Regulations

**Regulatory Docket No. FAA-2005-20583**

**DENIAL OF EXEMPTION**

By letter dated February 24, 2005, Yannick Leleu, Dassault Aviation, Airworthiness Office DFT/NAV, 54, avenue Marcel DASSAULT AVIATION, BP 24, 33701 MERIGNAC Cedex France, petitioned for an exemption from §§ 91.613(b) and 135.170(c) of Title 14, Code of Federal Regulations (14 CFR). The proposed exemption, if granted, would permit relief from the flammability requirements for thermal and acoustic insulation materials installed on Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes.

**The petitioner requests relief from the following regulations:**

**Sections 91.613(b) and 135.170(c)**, which require compliance with the flammability requirements of § 25.856, at Amendment 25-111, for airplanes manufactured after September 2, 2005.

**The petitioner's supportive information is as follows:**

Summary of the petition for publication

The FAA has adopted upgraded flammability standards for thermal and acoustic insulation materials used in transport category airplanes. These new standards are defined in § 25.856 for which the applicability, (established in 14 CFR parts 91 and 135) is defined as of September 2, 2005.

“For aircraft in production, Dassault Aviation has developed some modifications in order to produce aircraft compliant with this new regulation.

“However, for spare parts of aircraft that are already in service, and specifically for Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes, Dassault Aviation has identified some parts, mainly pipes, for which it would be extremely difficult to make them compliant with the flame propagation regulation.

“Based on those factors, Dassault Aviation is officially applying for an exemption to the following operating rules, §§ 91.613(b) and 135.170(c), for some specific replacement parts (conditioning pipes) of Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes that are precisely listed in this document.”

### Background

“The worldwide Falcon fleet is composed of ‘out of production’ aircraft (Falcon 10, Falcon 20, Falcon 200, Falcon 900), and ‘In-production’ aircraft (F900EX series, F2000, F2000EX series and F50 series).

“In the scope of this petition, Dassault Aviation will address the case of conditioning pipes used in the Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes that have been in operation for more than 30 years.”

### Public Interest

“The effort of modifying the conditioning pipes of the Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes, considering all equipment qualification tests to be performed, would be extremely high.

“We believe that our Falcon 20 and Falcon 200 owners and operators, composed of many small companies and private owners, will be reluctant to support the development, qualification, and industrialization of spare parts compliant with the regulation.

“The consequence of imposing conditioning pipes of those aircraft to comply with the flame propagation rules would then put our customers in an uncomfortable situation.

“We would like to remind that Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes have been in operation for more than 30 years and that the in-service experience has not reported any significant incident directly linked to materials flammability issues.

“Our customers feel safe onboard our Falcon 20/200 aircraft. It is not excessive to say that compliance with § 25.853 for this type of aircraft is enough.

“Based on the above, we believe that granting of this exemption by the FAA would be in the public interest.”

### Petition for exemption

Based on the above, Dassault Aviation is specifically asking for a permanent exemption for conditioning pipes used in the Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes.

### Effect on safety

“Concerning flammability of materials installed in airplane compartment interiors, Falcon aircraft are already compliant with § 25.853(a) as well as § 25.855(d).

“These rules focus on materials located in occupied compartments and cargo or baggage compartments. For all designated areas where risk of fire exists, Dassault’s design and manufacturing standards have proven their efficiency and reliability over the course of many years. In fact, no reportable incident or accident resulting from severe fire has ever been reported on these models.

“The Falcon fleet has experienced more than 11,173,200 flight hours, with all types of missions and operations, for more than 1,538 aircraft, all over the world, since 1965. In our opinion, this exemption would not constitute a significant compromise to safety in view of the extensive in-service experience.

“We consider this extensive experience with no significant incident as evidence of Dassault Aviation’s quality and safety of design.”

### Operations outside the US

Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes will operate outside the U.S. in accordance with 14 CFR parts 91 and 135.

A summary of the petitioner’s request for exemption was published in the Federal Register on April 27, 2005 (70 FR 21837). No comments were received.

### **The FAA’s analysis/summary is as follows:**

The FAA has carefully considered the petitioner’s supporting information. The FAA has determined that the circumstances presented by the petitioner do not justify a grant of exemption. The FAA finds that the petitioner has not shown that a grant of exemption would be in the public interest.

The petitioner bases its justification for the exemption primarily on the assertion that the effort to modify the air conditioning ducts of the Dassault Model Mystere-Falcon 20 and Mystere-Falcon 200 series airplanes would be extremely high.

The final rule for Amendments 91-279 and 135-90 was published on July 31, 2003, and became effective on September 2, 2003. The final rule states that

materials are available that meet the new standards. When these air conditioning ducts are installed as replacements after September 2, 2005, those materials must meet the flame propagation requirements of § 25.856. Although Dassault makes the general claim it would be extremely difficult to make these parts comply, it has not shown why the granting of this petition is in the public interest. At present, all other affected airplanes are expected to comply with this requirement when replacing these types of parts. This requirement applies only to the materials that are replaced. There is no requirement to replace the insulation on these parts. Typically, a part is only replaced if it is soiled or damaged in such a way that it cannot be repaired. Data from the manufacturer indicates that the replacement interval is infrequent for these parts.

The final rule also states that the previous standards did not realistically address situations in which thermal or acoustic insulation materials may contribute to the propagation of a fire, thus the new flammability standards were adopted.

The petitioner notes that the non-compliant parts meet the existing requirements of § 25.853 and have extensive time-in-service with no reports of significant incidents directly linked to materials flammability issues. The new rules are intended to raise the level of safety, so compliance with the existing rules is not compensating and thus none of the reasons listed justify issuing an exemption. The fact that the service history does not show any problems with the existing design is positive, but indicates an absence of service history rather than a favorable service history. Relevant service data would include data which demonstrate that the existing thermal or acoustic insulation materials would not contribute to the propagation of a fire.

In consideration of the foregoing, I find that a grant of exemption is not in the public interest, and would significantly affect the overall 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, the petition of Dassault Aviation for an exemption from the flammability requirements of §§ 91.613(b) and 135.170(c) is denied.

Issued in Renton, Washington, on June 24, 2005.

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Mike Kaszycki  
Acting Manager  
Transport Airplane Directorate  
Aircraft Certification Service