

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

In the matter of the petition of

BAE Systems (Operations) Limited

for an exemption from §§ 26.11, 26.43,  
26.45, and 26.49 of Title 14, Code of  
Federal Regulations

**Regulatory Docket No. FAA-2008-0738**

**GRANT OF EXEMPTION**

By a submission to the Department of Transportation's Federal Docket Management System (FDMS) dated June 23, 2008, Mr. Iain Deed of BAE Systems (Operations) Limited, Prestwick International Airport, Ayrshire, Scotland, KA9 2RW United Kingdom, petitioned the Federal Aviation Administration (FAA) for an exemption from the requirements of Title 14, Code of Federal Regulations (CFR) 26.11, 26.43, 26.45, and 26.49. This exemption is requested for the British Aerospace Model HS 748 Series 2A and 2B airplanes. Section 26.11 requires development of instructions for continued airworthiness (ICA) applicable to an airplane's electrical wiring interconnection systems (EWIS). Sections 26.43, 26.45, and 26.49 are requirements related to the development of damage tolerance data for repairs and alterations.

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

**Section 26.11 Electrical wiring interconnection systems (EWIS) maintenance program,** which requires development of instructions for continued airworthiness (ICA) applicable to an airplane's electrical wiring interconnection systems (EWIS).

**§ 26.43 Holders of and applicants for type certificates—Repairs,** which requires development of damage tolerance data for repairs.

**§ 26.45 Holders of type certificates—Alterations and repairs to alterations,** which requires development of damage tolerance data for repairs and alterations.

**§ 26.49 Compliance plan**, which requires development of a compliance plan for §§ 26.43, 26.45, and 26.47.

**The petitioner supports its request with the following.** This information is quoted from Mr. Iain Deed's June 23 petition letter. The complete petition may be found in the docket.

#### **Reasons Why the Exemption Would Not Adversely Affect Public Safety**

Granting this exemption would not adversely affect safety as the numbers of British Aerospace HS748 Series 2A & 2B are very small. BAE Systems records currently indicate that there are no examples of this aircraft type operating in the United States under Part 121.

Whilst Part 129 (specifically 129.1 (a)) states that these regulations are applicable to foreign air carrier operations in the United States, and we have been informed by FAA Transport Airplane Directorate Renton that two Canadian operators operate a total of 3 Canadian registered under this part, our records indicate that there are currently no United States registered examples of this aircraft being operated outside the United States under part 129. Two of these aircraft are operated by a Canadian operator who has no scheduled air services into the United States and therefore must operate into the United States on an ad-hoc charter basis. One aircraft owned by another Canadian operator currently operates 4 return flights per week (summer schedule) into Fairbanks Alaska.

With reference to 14 CFR Part 129.109 and 129.111 specifically:

129.109 (b) that requires Supplemental inspections for U.S.-registered aircraft operating under Part 129, whereby, after December 20, 2010, a certificate holder may not operate an airplane unless they have an approved maintenance program that addresses the FAA approved damage tolerance based inspections and procedures for Fatigue Critical Baseline Structure and repairs alterations or modifications to this Fatigue Critical Baseline Structure

129.111(b) that requires foreign persons or air carriers who may operate affected US registered aircraft to comply with the maintenance programme and inspection requirements for EWIS after March 10, 2011, BAE Systems records indicate that no HS748 Series 2A or 2B aircraft fall within this criterion.

It is clear that the EWIS, and AASFR Damage Tolerance operating requirements are only applicable to US registered aircraft being operated by foreign air carriers under Part 129 and not foreign registered aircraft operating into the United States under Part 129. As stated above there are no US registered examples of this aircraft being operated outside the US under part 129.

Furthermore, there are currently only 2 (two) Canadian registered aircraft conforming to a standard detailed in FAA Type Certificate A24EU that could potentially be imported into the United States. No BAE Systems modifications or service bulletins exist that would enable non-conforming examples of the type to be converted to an FAA standard; BAE Systems have no plans to create such modifications or service bulletins in the future.

The FAA in its published final rule excluded a number of different transport category aircraft types from the DAH, EWIS, and AASFR Damage Tolerance operating requirements. These aircraft types were excluded on the basis that no examples were

currently operating under Parts 121 or 129. The reasons presented above are consistent with the FAA's approach and, therefore, BAE Systems (Operations) Limited should not be required to develop the data required by the 14 CFR Part 26, Subpart B, 26.11; Subpart E, 26.43, 26.45 & 26.49 requirements to support compliance with the operating rules in respect of the HS748 Series 2A and 2B aircraft type

The FAA's Transport Airplane Directorate ANM-116 consider that the British Aerospace HS748 Series 2A and 2B is a valid candidate for an exemption and have advised BAE Systems to submit an application based on the above criteria.

#### **Reason the Exemption Would Benefit the Public Interest**

BAE Systems consider that grant of this exemption would negate the need for FAA to evaluate the large quantity of data required to support compliance with these regulations; none of these aircraft currently operate in the United States under Part 121 and an insignificant number of foreign registered aircraft may infrequently operate under Part 129. Therefore, grant of this exemption would in turn reduce the burden on FAA resources and consequently public expenditure.

#### **Additional Information**

BAE Systems are a commercial entity, and as such would be required to recover any costs associated with developing the EWIS and AASFR Damage Tolerance ICA required by the Part 26 regulations. It is inevitable, therefore, that these costs would need to be passed on to operators of the affected types. However, there are only 3 HS748 aircraft operating under Part 129 rules (as these are foreign registered the specific part 129 rules requiring operators to have a maintenance programme addressing EWIS, and AASFR Damage Tolerance requirements do not apply) and none operate under Part 121 rules. Therefore, there is no possibility of BAE Systems ever recovering these costs. Consequently, in the event that this petition is refused, BAe Systems may choose to surrender Type Certificate No. A24EU.

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### **Federal Register publication**

A summary of the petition was published in the Federal Register on August 26, 2008 (73 FR 50397). No comments were received regarding the exemption request.

### **The FAA's analysis**

The FAA has developed criteria to consider when deciding whether to grant or deny a part 26 exemption request. These criteria were meant as a general guide to making decisions about such requests and were not developed for any specific request. The FAA uses these criteria as a starting point for making its decision. However other factors may also be considered before a final decision is made on any particular exemption request.

The criteria are illustrated in the table that follows.

**Table 1**

**Criteria for Considering Eligibility for Exemption  
from §§ 26.11, 26.43, 26.45, 26.47, or 26.49**

	<b>If the airworthiness authority for the state of design is</b>	<b>And</b>	<b>And</b>	<b>And</b>	<b>Then</b>
1	The FAA	No airplanes are operating under part 121 and it is unlikely that any will do so in the future <sup>3</sup>	No airplanes are operating under part 129 (N-registered) and it is unlikely that any will do so in the future <sup>3</sup>	No airplanes are being operated by a foreign air carrier and it is unlikely that any will do so in the future <sup>3</sup>	The DAH may be eligible for an exemption
2	The FAA	Airplanes are operating under part 121 but no airplanes will be operated under part 121 after the operational rule compliance date <sup>1</sup> and it is unlikely that any will return to such service in the future <sup>3</sup>	Airplanes are operating under part 129 (N-registered) but no airplanes will be operated under part 129 (N-registered) after the operational rule compliance date <sup>1</sup> and it is unlikely that any will return to such service in the future <sup>3</sup>	Airplanes are being operated by a foreign air carrier but no airplanes will be operated by a foreign air carrier after the operational rule compliance date <sup>1</sup> and it is unlikely that any will return to such service in the future <sup>3</sup>	The DAH may be eligible for an exemption
3	Not the FAA	No airplanes are operating under part 121 and it is unlikely that any will do so in the future <sup>3</sup>	No airplanes are operating under part 129 (N-registered) and it is unlikely that any will do so in the future <sup>3</sup>		The DAH may be eligible for an exemption
4	Not the FAA	Airplanes are operating under part 121 but no airplanes will be operated under part 121 after the operational rule compliance date <sup>2</sup> and it is unlikely that any will return to such service in the future <sup>3</sup>	Airplanes are operating under part 129 (N-registered) but no airplanes will be operated under part 129 (N-registered) after the operational rule compliance date <sup>2</sup> and it is unlikely that any will return to such service in the future <sup>3</sup>		The DAH may be eligible for an exemption

<sup>1</sup> The design approval holder must demonstrate that these airplanes will not be operating under part 121 or part 129, or operated by a foreign air carrier, after the operational rule compliance date by obtaining documentation of such from the current owners/operators of the airplanes.

<sup>2</sup> The design approval holder must demonstrate that these airplanes will not be operating under part 121 or part 129 after the operational rule compliance date by obtaining documentation of such from the current owners/operators of the airplanes.

<sup>3</sup> Arguments for the likelihood of an airplane not entering into air carrier service in the future should center on the airplane's age and/or current configuration.

The determination of whether an airplane is operating under part 121 or part 129 is based on whether the particular airplane is listed on an air carrier's Operations Specifications.

The rationale behind the criteria contained in the table above is that if there are no operators who will be required by the 121/129 rules, or (for U.S. manufacturers) the rules of foreign authorities who have harmonized with us, to use the data these regulations require to be developed, then it would be a poor use of resources to develop that data. Therefore, it would benefit both the DAH and the public as a whole to spend resources on more important safety issues rather than on developing data that will not be used. In addition, granting such an exemption would not adversely affect safety because there are no airplanes that would be required to incorporate the data, nor is it likely that there will be any in the future.

The FAA has reviewed BAE Systems (Operations) Limited's request and has determined that granting this exemption would not have an adverse effect on public safety and would be in the public interest based on the following information:

The FAA is not the airworthiness authority for the state of design for the HS Model 748 Series 2A and 2B airplanes. The FAA notes that its data indicates there are 4 Model HS 748 airplanes, all of Canadian registry, operating under part 129. BAE Systems states there are 3 such airplanes operating under part 129. There are currently no US-registered Model HS 748 Series 2A or 2B airplanes operating under parts 121 or 129. BAE Systems has stated that importing an existing Model HS 748 airplane currently operating under part 129 would require modifying it to conform with the standards listed on FAA Type Certificate A24EU. BAE Systems further states that it does not have, nor does it plan to produce, service information to define any necessary modifications for conformance with the FAA type certificate. As stated below, this exemption does not grant relief to related operational requirements in parts 121 and 129. Any person who chooses to enter service under those parts would need to comply with those operational requirements. We believe that no person would choose to do so because of the associated costs of modifying the airplane and complying with these operational requirements. Therefore, the FAA finds that it is unlikely the Model HS 748 Series 2A and 2B airplanes will ever be used in service under parts 121 or 129 (US-registered).

As a result, BAE Systems Model HS 748 Series 2A and 2B airplanes meet the baseline exemption criteria for part 26. There are no other factors to be considered regarding BAE Systems' petition for exemption.

### **Additional Information**

This exemption grants relief to BAE Systems (Operations) Limited from having to meet the requirements of § 26.11 for development of EWIS ICA, and of §§ 26.43, 26.45, and 26.49 for the development of damage tolerance data for repairs and alterations. This exemption does not grant relief from the related operational requirements contained in §§ 121.1111 and 121.1109 or §§ 129.111 and 129.109. Should a person choose to operate an HS Model 748 Series 2A or 2B airplane under part 121 or part 129 beyond the operational compliance deadlines as stated in

§§ 121.1111 and 121.1109 or §§ 129.111 and 129.109, that person will be required to comply with those operational requirements.

### **Supplemental Type Certificate (STC) Holders and Applicants**

The petitioner did not request an exemption for STC holders. But because of the way these rules are structured, we needed to consider how granting this petition would affect them. Section 26.11 requires an applicant for an amended type certificate or STC to evaluate whether the design change necessitates a revision to the EWIS ICA developed by the TC holder and approved by the FAA Oversight Office. Section 26.47 requires STC holders and applicants to use damage tolerance data developed by the TC holder to identify all alterations that affect fatigue critical baseline structure and fatigue critical alteration structure. Since in this case it would be BAE Systems applying for an amended TC, BAE Systems would be exempt from the requirements of §§ 26.11(c) and 26.47 if the FAA grants its petition. However, a grant of exemption for BAE Systems would mean that applicable STC holders and applicants would not be able to comply with the requirements of §§ 26.11 and 26.47. So the FAA considered the impact on these entities of whether a grant should be issued, and if so, whether it should be expanded to the applicable STC holders and applicants.

### **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, BAE Systems (Operations) Limited is hereby granted an exemption from §§ 26.11, 26.43, 26.45, 26.47, and 26.49 for Model HS 748 Series 2A and 2B airplanes.

In addition, since the FAA does not intend for these rules to apply to an STC holder or applicant if they do not apply to the type certificate holder for the airplane model being modified, this grant is extended to those STC holders and applicants that have modified or modify Model HS 748 Series 2A and 2B airplanes.

Issued in Renton Washington on December 2, 2008.

/s/Ali Bahrami  
Ali Bahrami  
Manager  
Transport Airplane Directorate  
Aircraft Certification Service