EASA PAD No.: 15-057

EASA

NOTIFICATION OF A PROPOSAL TO ISSUE AN AIRWORTHINESS DIRECTIVE



PAD No.: 15-057

Date: 05 May 2015

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation closing date indicated.

Design Approval Holder's Name: Airbus		Type/Model designation(s): A380 aeroplanes
TCDS Number:	EASA.A.110	
Foreign AD:	Not applicable	
Supersedure:	None	
ATA 57	Wings – Flap Track # 6 – Modification	
Manufacturer(s):	Airbus	
Applicability:	Airbus A380-841, A380-842 and A380-861 aeroplanes, all manufacturer serial numbers (MSN), except aeroplane on which Airbus modifications (Mod.) 74442 74423, 74596, 74424 and 74419 have been embodied in production.	
Reason:	It has been concluded that the assumed acting loads on the flap track (FT) #6, used during the type certification were incorrect, as shown during the A380 flight-testing performed to support investigation of the flap track vibration issue.	
	Analysis of the FT #6 and Aft Wing Bracket, taking into account the corrected loads, has determined that the service lives of these parts have to be limited. The fatigue life of these parts is dependent on the flap configuration setting used during take-off. The use of flap configuration 3 setting is considered to be the most demanding setting affecting fatigue behaviour of the affected parts.	
	This condition, if not corrected, could lead to failure and consequent in-flight loss of flap beam #6, including the attached flap, possibly resulting in damage to the aeroplane and/or difficulty to control the aeroplane and injury to persons on the ground.	
	To address this potential unsafe condition, Airbus developed a set of modifications available through Service Bulletins (SB) listed in Table 1 of this AD. In order to restore the fatigue life of the FT#6 and surrounding structure, those SB's have to be embodied concurrently.	

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	Table 1 List of modification SB's		
	SB reference	SB title	
	A380-57-8091	Modification of the flap track beam and aft kinematic.	
	A380-57-8092	Modification of the wing to flap track interfaces.	
	A380-57-8093	Modification of the flap track fairing.	
	A380-57-8094	Modification of the flap fairing bracket.	
	For the reason described above, this AD requires modification of the FT#6 and surrounding structure.		
Effective Date:	[TBD: 14 days after final AD issue date]		
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: Within the compliance time as defined in Appendix 1 of this AD, as applicable, depending on the flap configuration 3 setting usage, modify the Left Hand (LH) and Right Hand (RH) FT#6 and surrounding structure in accordance with the instructions of Airbus SB A380-57-8091, SB A380-57-8092, SB A380-57-8093 and SB A380-57-8094. Review of the aeroplane operational records is acceptable to make the determination of the flap configuration usage since aeroplane first flight, provided those records can be relied upon for that purpose.		
Ref. Publications:	Airbus SB A380-57-8091 original issue, dated 15 December 2014. Airbus SB A380-57-8092 original issue, dated 10 December 2014. Airbus SB A380-57-8093 original issue, dated 10 December 2014. Airbus SB A380-57-8094 original issue, dated 10 December 2014. The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.		
Remarks:	 This Proposed AD will be closed for consultation on 18 June 2015. Enquiries regarding this PAD should be referred to the Safety Information Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS SAS - EIANA (Airworthiness Office), Telephone: +33 562 110 253; Fax: +33 562 110 307 E-mail: account.airworth-A380@airbus.com. 		

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Appendix 1

Replacement Compliance Time

Usage of flap configuration 3 setting	Compliance Time
Equal to or more than 10% usage of	For MSN 0003, 0005 through 0014 inclusive:
configuration 3 setting or aeroplanes for which the usage of less than 10% configuration setting cannot be demonstrated	3 100 flight cycles (FC) since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable, or within 150 FC from the effective date of this AD, whichever occurs later.
	For MSN 0015 through 0167 inclusive:
	3 400 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable, or within 150 FC from the effective date of this AD, whichever occurs later.
Less than 10% usage of configuration 3 setting for a cumulated period of 2 000 FC within 4 000 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable.	4 000 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable.
Less than 10% usage of configuration 3 setting for a cumulated period of 3 000 FC within 4 371 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable.	4 371 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable.
Less than 10% usage of configuration 3 setting for a cumulated period of 4 000 FC within 4 688 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing Bracket on an aeroplane, as applicable.	4 688 FC since the aeroplane first flight or since the last installation of the FT#6 and Aft Wing bracket on an aeroplane, as applicable.