## **EASA EMERGENCY AIRWORTHINESS DIRECTIVE** AD No.: 2007 - 0222R1-E Date: 24 September 2007 No person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of that Airworthiness Directive unless otherwise agreed with the Authority of the State of Registry. Type/Model designation(s): Type Approval Holder's Name: **AIRBUS** A330 and A340-200/-300 aircraft TCDS Number: EASA A.004, EASA A.015 Foreign AD: Not applicable Revision: This Emergency AD revises EASA EAD 2007-0222 E dated 14 August 2007. Flight Controls - Flap Down Drive Shaft - Initial Inspection **ATA 27** AIRBUS (formerly AIRBUS INDUSTRIE) Manufacturer(s): AIRBUS A330 aircraft, all certified models, all manufacturer serial Applicability numbers (MSN) up to MSN 0420 included. AIRBUS aircraft A340-200 and A340-300 series, all certified models, all manufacturer serial numbers up to MSN 0415 included except MSN 0385, 0395. Reason: Several cases of corrosion and damage on the Down Drive Shafts (DDS), between the Down Drive Gear Box (DDGB) and the Input Gear Box (IPGB), on all 10 Flap Tracks (5 per wing), have been reported by AIRBUS Long Range Operators. Investigations have revealed that corrosion and wear due to absence of grease in the spline interfaces could cause down drive shaft disconnection which could result in a free movable flap surface potentially leading to aircraft asymmetry or even flap detachment. This Emergency Airworthiness Directive (EAD) mandates on all aircraft older than 6 years since AIRBUS original delivery date of the aircraft an initial inspection of all DDS and IPGB for corrosion and wear detection in order to replace any damaged part. It is anticipated that this inspection will be turned into a repetitive

inspection applicable to all aircraft per SB A330-27-3152 and A340-27-

	4450
	4152.
	Revision 1 of this EAD aims to clarify the compliance instructions.
Effective Date:	26 September 2007
Compliance:	At 16 August 2007 [the effective date of EAD 2007-0222-E], for aircraft which have less than 10 years since AIRBUS original delivery date (AIRBUS must be contacted in order to get appropriate information for aircraft on which AIRBUS original delivery date of the aircraft is unknown to the operator):
	Unless already accomplished, within 24 months following 16 August 2007 [the effective date of EAD 2007-0222-E],
	In accordance with instructions of the relevant AIRBUS Service Bulletin (SB) A330-27-3151 or SB A340-27-4151, perform simultaneously detailed visual inspections of the Input Gear Boxes (IPGB) and of the Down Drive Shafts (DDS) on all flap tracks on both wings for corrosion and wear detection and apply the associated corrective actions, as necessary.  The inspection results, whatever they are must be reported to AIRBUS.
	<ul> <li>2. At 16 August 2007 [the effective date of EAD 2007-0222-E], for aircraft which have 10 years or more since AIRBUS original delivery date (AIRBUS must be contacted in order to get appropriate information for aircraft on which AIRBUS original delivery date of the aircraft is unknown to the operator):</li> <li>Unless already accomplished, within 4 months following 16 August 2007 [the effective date of EAD 2007-0222-E]:</li> <li>In accordance with instructions of the relevant AIRBUS Service Bulletin (SB) A330-27-3151 or SB A340-27-4151, perform simultaneously detailed visual inspections of the Input Gear Boxes (IPGB) and of the Down Drive Shafts (DDS) on flap tracks 2 and 4 on both wings for corrosion and wear detection.</li> <li>2.1. For each wing, if there are no findings on the DDS examined on the flap tracks 2 and 4, within 18 months following the last inspection, perform an inspection of the IPGB and DDS on all remaining flap</li> </ul>
	tracks and apply the associated corrective actions, as necessary.  2.2. For each wing, if there are any findings on the DDS examined on the flap tracks 2 or 4, before next flight, perform an inspection of the IPGB and DDS on flap track 3 and apply the associated corrective actions, as necessary.
	2.2.1. For each wing, if there are no findings on the DDS examined on the flap track 3, within 18 months following the last inspection, perform an inspection of the IPGB and DDS on all remaining flap tracks and apply the associated corrective actions, as necessary.
	2.2.2. For each wing, if there are any findings on the DDS examined on the flap track 3, before next flight, perform an inspection of the IPGB and DDS on flap tracks 1 and 5 and apply the associated corrective actions, as necessary.
	2.3. The inspection results, whatever they are, must be reported to AIRBUS.

Ref. Publications:	AIRBUS Service Bulletin A330-27-3151 AIRBUS Service Bulletin A340-27-4151 or later approved revisions of these documents.
Remarks :	If requested and appropriately substantiated, EASA can accept Alternative Methods of Compliance for this AD.
	The safety assessment has requested not to implement the full consultation process and immediate publication and notification.
	<ol> <li>Enquiries regarding this Airworthiness Directive should be referred to the AD Focal Point - Certification Directorate, EASA.</li> <li>E-mail: <a href="mailto:ADS@easa.europa.eu">ADS@easa.europa.eu</a></li> </ol>
	4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS – Airworthiness Office – EAL Fax: + 33 5 61 93 45 80 or + 33 5 61 93 44 51, E- mail: airworthines (A) 10-10-10-10-10-10-10-10-10-10-10-10-10-1

