


EASA	AIRWORTHINESS DIRECTIVE
	<p>AD No.: 2007 - 0188R1</p> <p>Date: 24 July 2007</p>
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 Approval Holder's Name : AIRBUS	Type/Model designation(s) : A330 and A340 aircraft
TCDS Number: EASA A.004, EASA A.015	
Foreign AD: Not applicable	
Revision: This AD revises Emergency AD 2007-0188-E	
ATA 24 & 49	Electrical Power / Auxiliary Power Unit (APU) – APU Generator - Inspection
Manufacturer(s):	AIRBUS (formerly AIRBUS INDUSTRIE)
Applicability:	AIRBUS A330 and A340 aircraft, all certified models, all serial numbers.
Reason:	<p>Two A330 operators have reported uncontained APU generator failures on ground.</p> <p>Preliminary investigations confirmed an uncontained APU Generator failure with subsequent aircraft structural damages to the APU compartment and, in one case, to the stabiliser compartment</p> <p>Loose APU generator parts can lead to damage to the APU fire wall which might reduce its fire extinguishing capability, possibly leading to a temporary uncontrolled fire which constitutes an unsafe condition.</p> <p>Further detailed investigations are ongoing to determine the root causes. It has been evidenced that for both events, this unknown root cause initiates a collapse of the Drive End Bearing (DEB) leading to an uncontained failure-Evidence shows also that the DEB failures were not instantaneous, and therefore, the detection of small debris could indicate early stage of DEB failure.</p> <p>A one-time inspection for detection of large-scale debris in the Generator Scavenge inlet screen (last chance filter) of the APU allowing to identify APU Generator in a state close to failure has been rendered mandatory</p>

	<p>by Airworthiness Directive (AD) 2007-0080-R1.</p> <p>The original Emergency Airworthiness Directive (AD) 2007-0188-E mandated a repetitive inspection of the APU Generator Scavenge filter element and filter housing and APU Generator Drain plug for signs of small debris coming from the APU Generator and therefore to detect any APU Generator failure in an early stage.</p> <p>This Revision 1:</p> <ul style="list-style-type: none"> - Extends the compliance date for accomplishment of the first inspection from 26 July 2007 to 10 August 2007. - Provides an option to perform the repetitive inspection every 450 Aircraft Flight Hours or every 200 APU operating hours, whichever occurs later.
Effective Date:	16 July 2007 (effective date of AD 2007-0188-E)
Compliance:	<p>1. <u>For Aircraft delivered before 01 JULY 2007:</u></p> <p>1.1. No later than 10 August 2007, unless already accomplished, In accordance with instructions of paragraph 4.2.1 of the relevant AIRBUS All Operators Telex (AOT) A330-24A3044 or AOT A340-24A4057 or AOT A340-24A5021:</p> <ul style="list-style-type: none"> - clean and inspect the APU Generator scavenge oil filter element and housing for detection of metallic debris, and - inspect the APU Generator drain plug for detection of metallic debris, and apply the necessary associated corrective actions. <p>1.2 Within 450 Aircraft Flight Hours (AFH) or 200 APU operating hours, whichever occurs later, after the inspection defined in paragraph 1.1 of this AD, in accordance with instructions of paragraph 4.2.2 of the relevant AIRBUS AOT A330-24A3044 or AOT A340-24A4057 or AOT A340-24A5021 :</p> <ul style="list-style-type: none"> - inspect the APU Generator scavenge oil filter element and housing for detection of magnetic metallic debris, and - inspect the APU Generator drain plug for detection of metallic debris, and apply the necessary associated corrective actions. <p>1.3 Repeat these inspections defined in paragraph 1.2 at interval not exceeding 450 AFH or 200 APU operating hours, whichever occurs later, and apply the associated corrective actions.</p> <p>2. <u>For Aircraft delivered after 01 JULY 2007 included:</u></p>

	<p>2.1. Within 450 AFH or 200 APU operating hours, whichever occurs later, following the original aircraft delivery date,</p> <p>In accordance with instructions of paragraph 4.2.2 of the relevant AIRBUS All Operators Telex (AOT) A330-24A3044 or AOT A340-24A4057 or AOT A340-24A5021:</p> <ul style="list-style-type: none"> - inspect the APU Generator scavenge oil filter element and housing for detection of magnetic metallic debris, <p>and</p> <ul style="list-style-type: none"> - inspect the APU Generator drain plug for detection of metallic debris, <p>and apply the necessary associated corrective actions.</p> <p>2.2. Repeat these inspections at interval not exceeding 450 AFH or 200 APU operating hours, whichever occurs later and apply the associated corrective actions.</p> <p><u>Alternative Means Of Compliance (AMOC) to inspection defined in paragraph 1.1 of this AD:</u></p> <p>Aircraft dispatch is authorised provided one of the options described in paragraph 4.3 of the relevant AIRBUS AOT A330-24A3044 or AOT A340-24A4057 or AOT A340-24A5021 is applied.</p> <p><u>3. ADDITIONAL REQUIREMENTS FOR A330 AIRCRAFT UNDER MMEL item 24-22-01 'AC Main Generation' and/or MMEL item 36-11-01 'Bleed Air Supply System failure' :</u></p> <p>Unless the APU Generator is deactivated (quill shaft removed) or removed as per MMEL item :</p> <p>The repetitive inspection described in above-mentioned paragraph 1.3 or 2.2. of this AD, must be performed before the first flight of the MMEL interval, when the aircraft is dispatched with APU operating during the entire flight in accordance with MMEL requirements.</p>
Ref. Publications:	<p>AIRBUS All Operators Telex (AOT) A330-24A3044 Original issue or Revision 1;</p> <p>AIRBUS AOT A340-24A4057 Original issue or Revision 1;</p> <p>AIRBUS AOT A340-24A5021 Original issue or Revision 1</p> <p>or later approved revisions of these documents.</p>
Remarks :	<ol style="list-style-type: none"> 1. If requested and appropriately substantiated the responsible EASA manager for the related product has the authority to accept Alternative Methods of Compliance (AMOCs) for this AD. 2. The safety assessment had requested not to implement the full consultation process and an immediate publication and notification. The initial issue was released as an Emergency AD on the 12th of July 2007. 3. Enquiries regarding this Airworthiness Directive should be referred to the AD Focal Point - Certification Directorate, EASA. E-mail: ADs@easa.europa.eu .

	<p>4. For any question concerning the technical content of the requirements in this AD, please contact: AIRBUS SAS – Airworthiness Office – EAL E- mail : airworthiness.A330-A340@airbus.com .</p>
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