 Direction générale de l'aviation civile France GSAC publication	AIRWORTHINESS DIRECTIVE No F-2006-009	Distribution: B	Issue date: January 04, 2006	Page : 1/4
	This Airworthiness Directive is published by the DGAC on behalf of EASA, Airworthiness Authority of the State of Design for the affected product, part or appliance.		<i>Translation of « Consigne de Navigabilité » of same number. In case of difficulty, reference should be made to the French issue.</i>	
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.				
Corresponding foreign Airworthiness Directive(s): Not applicable		Airworthiness Directive(s) replaced: F-2005-072 cancelled by its Revision 1		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A340-200/300 aircraft		
Type certificate(s) No. EASA.A.015 TCDS No EASA.A.015				
ATA chapter: 57	Subject: Wing - Rib 6 inspection and modification			

1. EFFECTIVITY:

AIRBUS aircraft A340-200 and A340-300 series, all certified models, all serial numbers, on which AIRBUS modification 41114 has been embodied in production except those on which AIRBUS modification 53883 has been embodied in production or AIRBUS Service Bulletin (SB) A340-57-4096 has been embodied in service on both wings.

2. REASONS:

The aim of this new Airworthiness Directive (AD) which deals with the same subject as F-2005-072 is:

- to supersede AD F-2005-072,
- to delete a grace period which is not relevant any longer,
- to render mandatory the modification of the wing rib 6 by installation of a reinforcing plate on the wings not already repaired in accordance with repair solution R572-57023 or R572-57026.

Reminder of the reasons given in AD F-2005-072 and F-2004-195:

An A330 operator has reported during a maintenance check, significant cracking of LH and RH wing rib 6 aft web.

The cracks are located in the lower part of rib 6 aft aperture, between bottom skin stringers 18 and 20, and extend from the lower edge of aperture in rib 6 to a fastener hole and then into the fuel pipe hole. The crack has developed through the full thickness of the rib 6.

An inspection performed on another aircraft of similar age identified similar finding.

This situation if not corrected, can lead to over loading of adjacent ribs and the surrounding wing structure. Crack propagation in rib 6 web could affect the structural integrity of wing.



AD F-2005-072 was issued in order:

- to supersede AD F-2004-195,
- to decrease the inspection threshold of the rib 6,
- to introduce reference to AIRBUS Service Bulletin (SB) A340-57-4095 or MOD 53882 (satellite holes cold working plus interference fit fasteners),
- to clarify inspection requirements in case of hard/overweight landing.

3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

The following measures are rendered mandatory from May 07, 2005 (Effective Date (ED) of the AD F-2005-072):

3.1. For aircraft which have not received AIRBUS Modification 53882 (Wings - Rework Rib 6 and refuel pipe fastener holes) in production:

3.1.1. Unless already accomplished, perform inspections on left and right wing rib 6 in accordance with the instructions given in AIRBUS SB A340-57-4093 Revision 01:

- For aircraft which have accumulated less than 8,000 flight cycles (FC) and 30,200 flight hours (FH) since the first flight on May 07, 2005:

before accumulation of 8,000 FC or 30,200 FH, whichever occurs first.

Reminder of the requirements of AD F-2005-072:

- For aircraft which have accumulated more than 8,000 FC or 30,200 FH since first flight on May 07, 2005 (ED of AD F-2005-072), before accumulation of 10,000 FC or 43,700 FH whichever occurs first, but no later than December 31, 2005.

Reminder of the requirements of AD F-2004-195:

- For aircraft which have accumulated more than 10,000 FC or 43,700 FH since first flight on December 22, 2004 (ED of AD F-2004-195), no later than March 31, 2005.


Note 1: No immediate additional inspection is required for aircraft previously inspected as per AIRBUS All Operators Telex (AOT) A340-57A4093 and without crack finding.

Note 2: The mandatory inspection threshold for aircraft on which AIRBUS SB A340-57-4095 has been performed, has to be calculated from AIRBUS SB A340-57-4095 embodiment time and is provided in the Inspection Flow Chart Figure 4 Sheet 1 of AIRBUS SB A340-57-4093 Revision 01 and depends on aircraft weight variant (see § 3.1.2.).

3.1.2. If no cracks are found after inspections performed per AIRBUS AOT A340-57A4093 or AIRBUS SB A340-57-4093 Revision 01:

- For aircraft which have not received application of AIRBUS SB A340-57-4095 in service (Wings - Rework Rib 6 and refuel pipe fastener holes):

Repeat inspections defined in AIRBUS SB A340-57-4093 Revision 01 at intervals not exceeding 8000 FC or 30200 FH following the last inspection, whichever occurs first and apply if necessary the corrective actions defined in § 3.1.3. of this AD.

	<p style="text-align: center;">AIRWORTHINESS DIRECTIVE No F-2006-009</p>	<p>Distribution: B</p>	<p>Issue date: January 04, 2006</p>	<p>Page: 3/4</p>
---	--	-----------------------------------	--	-----------------------------

- For aircraft which have received application of AIRBUS SB A340-57-4095 in service (Wings - Rework Rib 6 and refuel pipe fastener holes):
 - Perform inspections defined in AIRBUS SB A340-57-4093 Revision 01 at the next threshold values mentioned in the Inspection Flow Chart Figure 4 Sheet 1 of this SB, and apply if necessary the corrective actions defined in § 3.1.3. of this AD,
 - If no crack is found, repeat these inspections at intervals not exceeding 8,000 FC or 30,200 FH, whichever occurs first, and apply if necessary the corrective actions defined in § 3.1.3. of this AD.

3.1.3. In case any crack or damage is found:

- Contact AIRBUS to get a repair instruction before next flight.
- After repair, contact airbus for subsequent thresholds and intervals associated to the specific inspection program.

3.2. For aircraft which have received AIRBUS Modification 53882 (Wings - Rework Rib 6 and refuel pipe fastener holes) in production:

3.2.1. Perform inspections defined in AIRBUS SB A340-57-4093 Revision 01 at the threshold values mentioned in the Inspection Flow Chart Figure 4 Sheet 1 of this SB, and apply if necessary the corrective actions defined in § 3.2.3 of this AD.

3.2.2. If no crack is found, repeat inspections at intervals not exceeding 8,000 FC or 30,200 FH, whichever occurs first, and apply if necessary the corrective actions defined in § 3.2.3. of this AD.

3.2.3. In case any crack or damage is found:

- Contact AIRBUS to get a repair instruction before next flight.
- After repair, contact AIRBUS for subsequent thresholds and intervals associated to the specific inspection program.

3.3. Hard or Overweight landing case:


For aircraft above 8,000 FC or 30,200 FH with at least one wing rib 6 not repaired in accordance with § 3.1.3. or 3.2.3. of this AD nor modified per AIRBUS SB A340-57-4095 nor modified per SB A340-57-4096, perform the following inspections, on the wing(s) not previously repaired nor modified, in case of Hard or Overweight Landing reported by the crew:

3.3.1. Prior to next flight and in addition to AMM 05-51-11 visual inspection, perform a Detailed Visual Inspection (DVI) from outside of the wing bottom skin surface in accordance with AIRBUS Technical Disposition TD/J1/S3/00608/2005. Contact AIRBUS to get this Technical Disposition.

3.3.2. In case of nil finding after the AMM inspection and DVI, within 10 FC following this DVI perform an Ultra-Sonic Inspection (USI) from outside of the wing bottom skin surface in accordance with AIRBUS Technical Disposition TD/J1/S3/00608/2005. Contact AIRBUS to get this Technical Disposition.

3.3.3. In case of finding after AMM inspection or DVI or USI, contact AIRBUS prior next flight to get instructions.

Note 3: Hard/Overweight Landing definition can be found in AMM Chapter 05-51-11.

	AIRWORTHINESS DIRECTIVE No F-2006-009	Distribution: B	Issue date: January 04, 2006	Page: 4/4
---	--	---------------------------	--	---------------------

3.4. Terminating action (modification) :

Unless already accomplished, no later than December 31, 2010, modify in accordance with instructions given in SB A340-57-4096 the rib 6 on the wings which have not been already repaired in accordance with repair instructions R572-57023 or R572-57026.

Note 4: Embodiment of SB A340-57-4096 cancels the requirements of paragraphs 3.1., 3.2. and 3.3. of this AD, except paragraphs 3.1.3. and 3.2.3. which remain applicable to any wing side repaired in accordance with repair instructions R572-57023 or R572-57026 (a specific mandatory inspection program is applicable to the repaired wings).

4. REFERENCE PUBLICATIONS:

AIRBUS All Operators Telex A340-57A4093 dated December 15, 2004
AIRBUS Service Bulletin A340-57-4093 Revision 01
AIRBUS Service Bulletin A340-57-4095
AIRBUS Service Bulletin A340-57-4096
(Any later approved revision of these documents is acceptable)
AIRBUS Technical Disposition TD/J1/S3/00608/2005.

5. EFFECTIVE DATE:

January 14, 2006.

6. REMARK:

For questions concerning the technical contents of this AD's requirements, contact:
AIRBUS SAS - Office of Airworthiness - EAL - Fax : 33 5 61 93 45 80 or 33 5 61 93 44 51.

7. APPROVAL:

This AD is approved under EASA reference No 2005-6453 dated December 23, 2005.

SUPERSEDED