	AIRWORTHINESS DIRECTIVE No F-2005-005 R1	Distribution: B	Issue date: April 27, 2005	Page : 1/3
	Direction générale de l'aviation civile France GSAC publication	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-2005-005 original issue		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A340 aircraft		
Type certificate(s) No. A.015 TCDS No A.015				
ATA chapter: 28	Subject: Fuel - THS fuel tanks - Inspection and modification of the Argo-Tech or Intertechnique vent float valves			

1. EFFECTIVITY:

AIRBUS A340 aircraft models -211, -212, -213, -311, -312 and -313, all serial numbers, except for aircraft which have received the AIRBUS modifications 51953 and either 52110 or 53081 in production or AIRBUS Service Bulletins (SB) A340-28-4102 and either SB A340-28-4103 Rev 01 or SB A340-28-4111 in service.

AIRBUS A340 aircraft models -541 and -642, all serial numbers, except for aircraft which have received the AIRBUS modifications 51951 and either 52109 or 53081 in production or SB A340 28-5007 and either SB A340 28-5010 or SB A340 28-5021 in service.

2. REASONS:

It has been reported that on A330/A340 aircraft, Argo-Tech vent float valves (PN) 61600 and Intertechnique vent float valves PN L87-13-001, of the fuel vent system located at the ends of the trimmable horizontal stabilizer (THS) were damaged due to environmental fatigue that exceeded the equipment qualification standards.


The damage caused can be summarized as follows, for each type of valve:

- Detachment of the secondary float body of the Argo-Tech valve, comprising a metallic centre part. This secondary float arm is thus exposed to erosion phenomena when in contact with the walls of the tank.
- Complete detachment of the float from the body of the Intertechnique valve when the two arms of the float broke in the most critical case.

This freedom of movement in the tank thus caused by the detachment of the parts, and in particular the metallic parts, may result in ignition sources, which may lead to sparks or an increase in the static load and/or structural damage.

If not corrected, this situation, combined with other factors (in particular certain atmospheric conditions or the location/orientation of debris) may lead to a potentially catastrophic event.

Airworthiness Directive (AD) F-2003-408 required a repetitive inspection of the vent float valve of the trim tanks.

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AD F-2005-005 at original issue:

- took over requirements of AD F-2003-408, cancelled by its Revision 1,
- mandated the modification of the float vent valves.


The aim of this Revision 1 is to introduce for the LH trim tank vent float valve Intertechnique, the PN L87-13-003 as an alternative means of compliance to the replacement of LH valve Intertechnique.

3. MANDATORY ACTIONS AND COMPLIANCE TIMES:

AIRBUS A340-200 and A340-300 aircraft

The following measures are rendered mandatory from November 08, 2003 (effective date of the AD F-2003-408):

- 3.1.** Unless already accomplished, perform a detailed visual boroscope inspection of the vent float valve of the vent system of the LH and RH trim tanks in accordance with the instructions of SB A340-28-4100 and SB A340-28-4101:
 - 3.1.1.** for aircraft which have accumulated, at November 08, 2003, more than 15,000 flight hours (FH) or 2,500 flights cycles (FC) since first flight, whichever occurs first, within 7,500 FH following November 08, 2003,
 - 3.1.2.** for the other aircraft: within 7,500 FH following the actual date when the aircraft has accumulated 15,000 FH or 2,500 FC since first flight, whichever occurs first.
- 3.2.** If a damage is detected, apply the corrective actions if necessary, in accordance with the instructions of SB A340-28-4100 and SB A340-28-4101.
- 3.3.** If no damage is detected, no later than 10,000 FH or 1,500 FC, whichever occurs first, after the last inspection performed according to paragraph 3.1 of this AD:
 - For the RH trim tank vent float valve Argo-Tech P/N 61600:
 - replace valve with a new unit of the same PN in accordance with the instructions of SB A340-28-4100
 - or,
 - apply SB A340-28-4102 (replace Argo-Tech PN 61600 with a new PN).
 - For the LH trim tank vent float valve Intertechnique PN L87-13-001:
 - replace valve with a new unit of the same PN in accordance with the instructions of SB A340-28-4101
 - or,
 - apply SB A340-28-4103 Rev 01 or SB A340-28-4111 (replace Intertechnique PN L87-13-001 with a new PN).
- 3.4.** If a damaged vent float valve is replaced by a new Argo-Tech vent float valve PN 61600 or by a new Intertechnique vent float valve PN L87-13-001, apply the inspection instructions mentioned in paragraph 3.1. of this AD before accumulation of 15,000 FH or 2,500 FC after installation, whichever occurs first, and, according to the results, apply the requirements of paragraph 3.2. or paragraph 3.3 of this AD.

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AIRBUS A340-200, A340-300, A340-500 and A340-600 aircraft

The following measures are rendered mandatory from the effective date of this AD at original issue:

3.5. Unless already accomplished, not later than March 31, 2009:

- For the RH trim tank outboard vent float valve Argo-Tech PN 61600, apply SB A340-28-4102 or SB A340-28-5007 (replace Argo-Tech PN 61600 with a new PN),
- For the LH trim tank outboard vent float valve Intertechnique PN L87-13-001 apply SB A340-28-4103 Rev 01 or SB A340-28-4111 or SB A340-28-5010 or SB A340-28-5021 (replace Intertechnique PN L87-13-001 with a new PN).

Note 1: Argo-Tech and Intertechnique vent float valves PN 61600 and PN L87-13-001 removed from aircraft must be discarded.

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Note 2: AIRBUS recommends to replace the old valves by ones of a new PN at the first inspection as per paragraph 3.1 of this AD.

Note 3: Argo-Tech vent float valve new PN 62015-1 installed on A340 is not interchangeable with new PN 62015-1 installed on A330 and vice versa.

Intertechnique vent float valve new PN L87-13-002 or L87-13-003 installed on A340 is not interchangeable with new PN L87-13-002 or L87-13-003 installed on A330 and vice versa.

4. REFERENCE PUBLICATIONS:

AIRBUS Service Bulletin A340-28-4100
 AIRBUS Service Bulletin A340-28-4101
 AIRBUS Service Bulletin A340-28-4102
 AIRBUS Service Bulletin A340-28-4103 Rev 01
 AIRBUS Service Bulletin A340-28-4111
 AIRBUS Service Bulletin A340-28-5007
 AIRBUS Service Bulletin A340-28-5010
 AIRBUS Service Bulletin A340-28-5021
 (Any later approved revision of these SBs is acceptable).

5. EFFECTIVE DATES:

Original issue : January 15, 2005.
Revision 1 : May 07, 2005

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.

7. APPROVAL:

This AD Revision is approved under EASA reference No 2005-3643 dated April 20, 2005.