	AIRWORTHINESS DIRECTIVE No F-2005-020 R1	Distribution: B	Issue date: May 11, 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-2005-020 original issue		
Person in charge of airworthiness: AIRBUS SAS		Type(s): A340 aircraft		
Type certificate(s) No. EASA.A.015 TCDS No EASA.A.015				
ATA chapter: 26	Subject: Fire protection - Inspection for cleaning of the fire extinguishing system in LDCC and BCRC cargo compartments			

1. **EFFECTIVITY:**

AIRBUS aircraft A340-200, A340-300, A340-500 and A340-600 series, all certified models, all serial numbers.

2. **REASONS:**

Flight tests have shown that the Flow Metering System (FMS) and the Flow Metering Compact Unit (FMCU) of the fire extinguishing system may be blocked by anti-fretting material contamination. The origin of this anti-fretting material inside the piping, filters and pressure reducers may come from manufacturing of the parts as well as installation on aircraft during production or maintenance.

After the first activation of the fire extinguishing system, it has been assumed that the FMS or FMCU is contaminated and it cannot be guaranteed that the system is fully operable for the next fire extinguishing process if requested. An uncontrollable fire in the affected compartment may lead to a catastrophic event.

To avoid this hidden failure of the Lower Deck Cargo Compartment (LDCC)/Bulk Crew Rest Compartment (BCRC) fire extinguishing system due to contamination, this Airworthiness Directive (AD) requires a one time inspection to clean the FMS and FMCU and mandates new procedures for the restoration of the fire extinguishing system after any activation.

The aim of this Revision 1 is to:

- refer to AIRBUS SB A340-26-4035 in § 3.2.4 after its availability,
- precise the caution note mentioned in the AMM procedures.

3. **MANDATORY ACTIONS AND COMPLIANCE TIMES:**

3.1. From the effective date of this AD at original issue, after any activation of the fire extinguishing system in the LDCC or in the BCRC, the restoration of the fire extinguishing system after activation must be performed taking into account the following caution note:



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“APPLY A SMALL QUANTITY OF THE CORRECT GREASE TO THE MALE THREADS OF THE CONNECTIONS. THIS WILL PREVENT DAMAGE TO THE THREADS. MAKE SURE THAT GREASE DOES NOT GO INTO THE PIPES. GREASE IN THE PIPES CAN CAUSE A MALFUNCTION OF THE SYSTEM.”

Note: this caution note has been introduced in the following procedures from the October 1st, 2004 revision of the Aircraft Maintenance Manual (AMM):

A340-300 AMM 26-28-00 Page Block 201 (BCRC - FMS) or
A340-500/-600 AMM 26-28-00 Page Block 201 (BCRC - FMS) or
A340 AMM 26-23-00 Page Block 201 (LDCC - FMCU) or
A340 AMM 26-23-00 Page Block 201 (LDCC - FMS).

3.2. The following measures are rendered mandatory except for aircraft delivered from production line after October 1st, 2004 (date of revision that includes both the restoration/cleaning task in the AMM and the anti-fretting material application caution note in the work instructions for AIRBUS Manufacturing) and on which the fire extinguishing system is confirmed to have never been activated before the effective date of this AD at original issue:

3.2.1. For A340-200/-300 and A340-500 series:

- For aircraft on which the fire extinguishing system has been activated at least once before the effective date of this AD at original issue or it is uncertain whether the fire extinguishing system has ever been activated or not:

within 2,400 Flight Hours (FH) following the effective date of this AD at original issue, perform a one time inspection to clean and restore the FMS in the LDCC with the pressure reducers replacement in accordance with instructions given in AIRBUS Service Bulletin (SB) A340-26-4031 Rev 02 or AIRBUS SB A340-26-5007.

- For aircraft on which the fire extinguishing system is confirmed to have never been activated before October 1st, 2004:

within 6,600 FH following the effective date of this AD at original issue, perform a one time inspection to clean and restore the FMS in the LDCC in accordance with instructions given in AIRBUS Service Bulletin (SB) A340-26-4031 Rev 02 or AIRBUS SB A340-26-5007.

3.2.2. For A340-600 series:


Perform a one time inspection to clean the hoses between the fire extinguishing bottles and the FMCU and replace the FMCU in the LDCC in accordance with instructions given in AIRBUS SB A340-26-5008:

- For aircraft on which the fire extinguishing system has been activated at least once before the effective date of this AD at original issue or it is uncertain whether the fire extinguishing system has ever been activated or not, within 2,400 FH following the effective date of this AD,

- For aircraft on which the fire extinguishing system is confirmed to have never been activated before 01 October 2004, within 6,600 FH following the effective date of this AD at original issue,

3.2.3. For A340-500 and A340-600 series which are fitted with BCRC embodied in production in accordance with AIRBUS modification 47198 or 47884 or 48895 or 48710 or 49136 or 50107 or 50900 or 51320 (installation of BCRC):

within 6,600 FH following the effective date of this AD at original issue, perform a one time inspection to clean and restore the FMS in the BCRC in accordance with instructions given in AIRBUS SB A340-26-5009.

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3.2.4. For A340-300 series which are fitted with BCRC embodied in production in accordance with AIRBUS modification 50901 (installation of BCRC):

within 6,600 FH following the effective date of this AD at original issue, perform a one time inspection to clean and restore the FMS in the BCRC in accordance with instructions given in AIRBUS SB A340-26-4035.

4. REFERENCE PUBLICATIONS:

AIRBUS Service Bulletin A340-26-4031 Rev 02
 AIRBUS Service Bulletin A340-26-4035
 AIRBUS Service Bulletin A340-26-5007
 AIRBUS Service Bulletin A340-26-5008
 AIRBUS Service Bulletin A340-26-5009
 (Any further approved revision of these SB is acceptable).

5. EFFECTIVE DATES:

Original issue : February 12, 2005
Revision 1 : May 21, 2005

6. REMARK:

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

7. APPROVAL:

This AD Revision is approved under EASA reference No 2005-3959 dated May 02, 2005.