

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>EASA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>AIRWORTHINESS DIRECTIVE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | <p><b>AD No.: 2014-0144R1</b></p> <p><b>Date: 10 June 2014</b></p> <p>Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) No 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <p>This AD is issued in accordance with EU 748/2012, Part 21.A.3B. In accordance with EC 2042/2003 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, <b>no person</b> may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [EC 2042/2003 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [EC 216/2008, Article 14(4) exemption].</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <p><b>Design Approval Holder's Name:</b><br/>ATR-GIE AVIONS DE TRANSPORT RÉGIONAL</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p><b>Type/Model designation(s):</b><br/>ATR 72 and 42 aeroplanes</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| TCDS Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | EASA A.084                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Foreign AD:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Supersedure:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | None                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>ATA 26</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <b>Fire protection – Engine Fire Extinguishing Pipe – Inspection</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Manufacturer(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | ATR-GIE Avions de Transport Régional (formerly Aerospatiale – Aeritalia, Aerospatiale – Alenia, Aerospatiale ATR – Alenia, EADS ATR – Alenia)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Applicability:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Model ATR 42-500 aeroplanes, Manufacturer Serial Number (MSN) 859, and MSN 1001 through 1010 inclusive.</p> <p>Model ATR 72-212A aeroplanes, MSN 988 and 989; MSN 993 through 1000 inclusive, except MSN 996; and MSN 1020 through 1142 inclusive, except MSN 1071, 1135, 1139, 1140 and 1141.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Reason:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <p>Damage of an engine fire extinguishing pipe was reported on an in-service ATR 72-212A aeroplane. The damage was induced by chafing between the engine fire extinguishing pipe and a fastener assembly installed between flap arm and hinge flap at rib 4 during flaps extension to the 30 degrees position. The subsequent investigation also determined that the chafing occurred as a result of an incorrect (back to front) installation of the pipe.</p> <p>This condition, if not detected and corrected, could lead to damage of the fire extinguishing pipe, possibly generating a leak, leading to loss of available extinguishing agent and resulting in reduced capability to extinguish an engine fire.</p> <p>To address this potential unsafe condition, ATR issued Service Bulletins (SB) ATR42-26-0031 and ATR72-26-1027 to provide inspection instructions, as applicable to aeroplane model.</p> <p>For the reasons described above, this AD requires a one-time visual inspection of the affected area and, depending on findings, accomplishment of applicable</p> |

|                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                            | <p>corrective actions.</p> <p>This AD is revised to correct ATR SB references.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Effective Date:                            | 13 June 2014 [same as original issue]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Required Action(s) and Compliance Time(s): | <p>Required as indicated, unless accomplished previously:</p> <ol style="list-style-type: none"> <li>(1) Within 150 flight hours or 30 days, whichever occurs first after the effective date of this AD, accomplish a one-time inspection of the Left Hand (LH) and Right Hand (RH) engine fire extinguishing pipe in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model.</li> <li>(2) If, during the inspection as required by paragraph (1) of this AD, any damage is detected on an engine fire extinguishing pipe, before next flight, remove the damaged pipe, measure the maximum wear depth in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model.</li> <li>(3) If, during a measurement as required by paragraph (2) of this AD, a depth of wear greater than 0.5 mm (0,0197 inch) is detected, before next flight, accomplish concurrently the actions as required by paragraphs (3.1), (3.2) and (3.3) of this AD, in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model. <ol style="list-style-type: none"> <li>(3.1) Replace the damaged pipe with a new engine fire extinguishing pipe,</li> <li>(3.2) Inspect LH and RH flap parts (flap fasteners, flap arms, hinge flaps) at rib 4, and, depending on findings, accomplish the applicable corrective action(s), and</li> <li>(3.3) Accomplish a Functional Test of the engine fire extinguishing system.</li> </ol> </li> <li>(4) If, during a measurement as required by paragraph (2) of this AD, a depth of wear less than, or equal to, 0.5 mm (0,0197 inch) is detected, before next flight, accomplish concurrently the actions as required by paragraphs (4.1), (4.2) and (4.3) of this AD in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model. <ol style="list-style-type: none"> <li>(4.1) Replace the damaged pipe with a new engine fire extinguishing pipe, or for a period not exceeding 30 days after the inspection as required by paragraph (1) of this AD, re-install correctly the damaged engine fire extinguishing pipe.</li> </ol> <p>Note: Unlike the instructions of SB ATR42-26-0031 and ATR72-26-1027, paragraph (4.1) of this AD allows re-installation of a damaged extinguishing pipe for a maximum of 30 days.</p> <ol style="list-style-type: none"> <li>(4.2) Inspect LH and RH flap parts (flap fasteners, flap arms, hinge flaps) at rib 4 and, depending on findings, accomplish the applicable corrective action(s), and</li> <li>(4.3) Accomplish a Functional Test of the engine fire extinguishing system.</li> </ol> </li> <li>(5) Within 30 days after the inspection as required by paragraph (1) of this AD, unless already accomplished as required by paragraph (3.1) or (4.1) of this AD, as applicable, replace the damaged fire extinguisher pipe in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model, and, concurrently, accomplish the actions as required by paragraphs (4.2) and (4.3) of this AD.</li> <li>(6) If, during the inspection as required by paragraph (1) of this AD, no damage is detected but the engine fire extinguishing pipe is found</li> </ol> |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                    | <p>incorrectly installed, before next flight, re-install correctly the fire extinguishing pipe and accomplish a Functional Test of the engine fire extinguishing system in accordance with the instructions of ATR SB ATR42-26-0031 or ATR72-26-1027, as applicable to aeroplane model.</p> <p>(7) If, during an inspection as required by paragraph (3.2) or (4.2) of this AD, as applicable, any damage is detected on flap arms or hinge flaps which is determined to be beyond the defined limits, as indicated in ATR SRM 51-10-10, before next flight, contact ATR to obtain approved repair instructions and accomplish those instructions accordingly.</p>                                                                                                                                                                                                                                                                    |
| Ref. Publications: | <p>ATR SB ATR42-26-0031 original issue dated 30 April 2014.</p> <p>ATR SB ATR72-26-1027 original issue dated 30 April 2014.</p> <p>The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.</p> <p>ATR SRM task 51-10-10.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Remarks:           | <ol style="list-style-type: none"> <li>1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> <li>2. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.</li> <li>3. Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <a href="mailto:ADs@easa.europa.eu">ADs@easa.europa.eu</a>.</li> <li>4. For any question concerning the technical content of the requirements in this AD, please contact:<br/>ATR - GIE Avions de Transport Régional,<br/>Continued Airworthiness Service,<br/>Tel.: +33 (0)5 62 21 62 21 - Fax: +33 (0) 5 62 21 67 18;<br/>E-mail: <a href="mailto:continued.airworthiness@atr.fr">continued.airworthiness@atr.fr</a>.</li> </ol> |