**EASA AIRWORTHINESS DIRECTIVE**

**AD No.: 2011-0090R1**

**Date: 13 July 2011**

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.

This AD is issued in accordance with EC 1702/2003, Part 21A.3 B. 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, no person 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].

<table>
<thead>
<tr>
<th>Type Approval Holder’s Name</th>
<th>Type/Model designation(s)</th>
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<tbody>
<tr>
<td>Intertechnique Aircraft Systems</td>
<td>Oxygen Mask Regulators</td>
</tr>
</tbody>
</table>

**ETSO (JTSO) Authorisations:** EASA 21O.10018226 and EASA 21O.10033672; DGAC France QAC 54538/SFACT/TC, F.O.001, F.O.007 and F.O.073.

**Foreign AD:** Not applicable

**Revision:** This AD revises EASA AD 2011-0090 dated 18 May 2011, including the correction dated 24 May 2011.

**ATA 35**

**Oxygen – Oxygen Mask Regulator Inflatable Harness – Identification / Replacement**

**Manufacturer(s):** Intertechnique (part of Zodiac Aerospace), EROS

**Applicability:** Flight Crew Oxygen Masks Regulators, all Part Number (P/N) MA10, MC10, MC20, MF10, MF20, MLC20, MLD20, MRA005, MRA022 and MRA023 series.

The affected Flight Crew Oxygen Masks Regulators are known to be installed on, but not limited to, aeronautics manufactured by Airbus, ATR, BAE Systems (formerly British Aerospace), Boeing, Bombardier (formerly Canadair, De Havilland Canada), Cessna, Dassault, EADS CASA, EMBRAER, Gulfstream, Hawker Beechcraft (formerly Raytheon, Beech), Israel Aircraft Industries (IAI), McDonnell Douglas, Piaggio, Pilatus, Piper and SOCATA.

**Reason:** A malfunction of a quick donning mask was reported to Intertechnique, who initiated an investigation in order to detect the root cause and the failure mode. Despite the fact that the analysis did not lead to any final conclusion, discrete suspected silicon batches have been identified which have shown an unusually high premature rupture rate.

Some of the affected harnesses are known to have been delivered as spares. Consequently, an inflatable harness belonging to one of the suspect batches may have become installed on an Oxygen Mask Regulator, the serial number (s/n) or P/N of which is not identified in Appendix II of Intertechnique Service Bulletin (SB) MXH-35-240.

This fact widens the Applicability of this AD to extend beyond the individual
Oxygen Mask Regulators identified by s/n and P/N in Appendix II of the SB.

This condition, if not detected and corrected, could lead, in case of a sudden depressurization event, to a harness rupture, thereby providing inadequate protection against hypoxia of the affected flight crew member, possibly resulting in unconsciousness and consequent reduced control of the aeroplane.

For the reasons described above, this AD requires the identification and replacement of all potentially defective harnesses with serviceable units.

**Note 1:** The affected batches were installed on harnesses manufactured between December 2008 and August 2010, having dates codes 0850S (week 50 of 2008) through 1031S (week 31 of 2010).

**Note 2:** Harness assemblies that do not have a batch code were manufactured before week 33 of 2008 and are not affected by this unsafe condition.

This AD has been revised to correct a typographical error in the Applicability, which inadvertently referred to P/N MA10-12 masks, whereas in fact, all P/N MA10 series could have an affected harness installed. In addition, this revised AD corrects **Note 2** (above), which confused harness manufacturing date codes with the affected harnesses batch codes.

This AD is also revised to make reference to the latest revisions of the referenced Intertechnique service publications which identify by s/n and P/N, in Appendix II of the SB, more oxygen mask regulators that are known or suspected to have an affected harness installed. Finally, this AD is revised to add a Note to the Required Actions section, to stress the fact that other oxygen mask regulators could be affected, in addition to those listed in Appendix II of the SB.

<table>
<thead>
<tr>
<th>Effective Date:</th>
<th>Revision 1: 27 July 2011</th>
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<td></td>
<td>Original issue: 01 June 2011</td>
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<th>Required Action(s) and Compliance Time(s):</th>
<th>Required as indicated, unless accomplished previously:</th>
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<td>(1) Within 24 months after 01 June 2011 [the effective date of the original issue of this AD], accomplish the following actions in accordance with Section 3 Accomplishment Instructions of Intertechnique SB MXH-35-240 at Revision 2 (or a later revision) on all affected aeroplanes, except for <strong>Bombardier aeroplanes</strong>, to which paragraph (4) applies:</td>
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<td>(1.1) Inspect the inflatable harness fitted to each Flight Crew Oxygen Mask Regulator that is installed in the aeroplane to identify the P/N and batch number of that harness.</td>
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<td>(1.2) If the P/N and batch number, identified as required by paragraph (1.1) of this AD, are listed in Appendix I of Intertechnique SB MXH-35-240, remove the inflatable harness from the mask regulator and replace it with a serviceable harness.</td>
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* For the purpose of this AD, **Bombardier aeroplanes** include aeroplanes previously manufactured by Canadair or by De Havilland Canada.

| (2) Oxygen mask regulators with a date of manufacturing (DMF) code of November 2008 (112008 or 11-08) or earlier, and those with a DMF of January 2011 (012011 or 01-11) or later, are excluded from the inspection and replacement requirements of paragraph (1) of this AD, provided it can be demonstrated that the inflatable harness has not been replaced on those masks. A review of aeroplane delivery- or maintenance records is acceptable to make the determination as specified in this paragraph, provided those records can be relied upon for that purpose, and the DMF of the Oxygen Mask Regulator can be conclusively identified from that review. |
(3) After the effective date of this AD, do not install a Flight Crew Oxygen Mask Regulator on an aeroplane, unless it has been determined that the P/N and batch number of the inflatable harness fitted to the Oxygen Mask Regulator is not listed in Appendix I of Intertechnique SB MXH-35-240. This determination can be made by following the flow chart contained in Section 3 Accomplishment Instructions of Intertechnique SB MXH-35-240.

Note: Making reference only to Appendix II of the SB to identify a specific oxygen mask regulator, is insufficient to demonstrate that the inflatable harness fitted to that oxygen mask regulator is not listed in Appendix I of Intertechnique SB MXH-35-240.

(4) For Bombardier aeroplanes, the instructions of Intertechnique SB MXH-35-241 (or a later revision) must be used to comply with the requirements of paragraph (1) and (3) of this AD.

Ref. Publications:

| Intertechnique SB MXH-35-240, currently at Revision 4 dated 10 June 2011. |
| Intertechnique SB MXH-35-241, currently at Revision 2 dated 19 May 2011. |
The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.

2. The original issue of this AD was posted on 18 March 2011 as PAD 11-031 for consultation until 15 April 2011 and republished on 12 April 2011 as PAD 11-031R1 for extended consultation until 29 April 2011. The Comment Response Document can be found at [http://ad.easa.europa.eu/](http://ad.easa.europa.eu/).

3. Enquiries regarding this AD should be referred to the Airworthiness Directives, Safety Management & Research Section, Certification Directorate, EASA. E-mail: ADs@easa.europa.eu.

4. For any question concerning the technical content of the requirements in this AD, please contact: INTERTECHNIQUE, 61 rue Pierre Curie BP 1, 78373 PLAISIR CEDEX FRANCE, Telephone +33 1 6134 1232, Fax +33 1 6486 6984, or contact Mr. Yann Laine at ZODIAC SERVICES for documentation, Telephone +33 1 6486 6964, E-mail yann.laine@zodiacaerospace.com.

For all other issues (logistics, orders) refer to the applicable SB.