



## Notification of a Proposal to issue an Airworthiness Directive

**PAD No.: 18-017**

**Issued: 07 February 2018**

Note: This Proposed Airworthiness Directive (PAD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation.

In accordance with the EASA Continuing Airworthiness Procedures, the Executive Director is proposing the issuance of an EASA Airworthiness Directive (AD), applicable to the aeronautical product(s) identified below.

All interested persons may send their comments, referencing the PAD Number above, to the e-mail address specified in the 'Remarks' section, prior to the consultation date indicated.

**Design Approval Holder's Name:**

AIRBUS

**Type/Model designation(s):**

A318, A319, A320 and A321 aeroplanes

**Effective Date:** [TBD - standard: 14 days after AD issue date]

**TCDS Number(s):** EASA.A.064

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes EASA AD 2017-0150 dated 16 August 2017.

### ATA 35 – Oxygen – Crew Oxygen / Oxygen Pipe Corrosion – Inspection

**Manufacturer(s):**

Airbus (formerly Airbus Industrie)

**Applicability:**

Airbus A318-111, A318-112, A318-121, A318-122, A319-111, A319-112, A319-113, A319-114, A319-115, A319-131, A319-132, A319-133, A320-211, A320-212, A320-214, A320-215, A320-216, A320-231, A320-232, A320-233, A321-111, A321-112, A321-131, A321-211, A321-212, A321-213, A321-231 and A321-232 aeroplanes, all manufacturer serial numbers (MSN), and

A320-251N, A320-271N and A321-271N aeroplanes, MSN 6101, 6286, 6419, 6642 and 6673.

**Definitions:**

For the purpose of this AD, the following definitions apply:

**Affected part:** A crew oxygen pipe assembly having Part Number (P/N) D3511032000640 and belonging to batch number 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410 or 40911832.



**Serviceable part:** A crew oxygen pipe assembly having P/N D3511032000640 and belonging to any batch number other than 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832.

**Group 1 aeroplanes:** MSN listed in Annex 1 of this AD.

**Group 2 aeroplanes:** MSN 4800 to 5255 inclusive, excluding MSN listed in Group 1.

**Group 3 aeroplanes:** MSN 6101, 6286, 6419, 6642 and 6673.

**The SB:** Airbus Service Bulletin (SB) A320-35-1069 Revision 02.

**Reason:**

Some oxygen pipe assemblies were found corroded during manufacturing at supplier level. The affected pipe assembly was installed at the end of the right hand (RH) crew distribution line, just upstream of the First Officer and RH Observer oxygen mask boxes.

The investigation showed that the affected pipes had been heat treated just 4 weeks before the summer factory closure and were only cleaned after re-opening of the factory. During this interruption, corrosion developed in these pipes.

This condition, if not detected and corrected, could lead to blocked or reduced oxygen supply to a flight crew member in case of decompression or smoke/fire in the cockpit. In addition, the presence of particles in oxygen lines, under certain conditions, increases the risk of fire in the cockpit.

The parts manufacturer identified the batch numbers of the potentially affected pipes that were manufactured in a specific period in 2011. Based on that information, Airbus identified the aeroplanes on which those pipes were installed on the production line and issued SB A320-35-1069, containing instructions to remove the affected pipes from service.

Consequently, EASA issued AD 2013-0278 to require the identification and replacement of the affected oxygen pipes. That AD also prohibited installation of any affected pipe on other aeroplanes.

After EASA AD 2013-0278 was issued, further investigation determined that affected oxygen pipes may have been installed on more aeroplanes than initially identified. Consequently, Airbus revised SB A320-35-1069 and EASA issued AD 2017-0150, retaining the requirements of EASA AD 2013-0278, which was superseded, and requiring the same actions on these additional aeroplanes.

Since EASA AD 2017-0150 was issued, it has been determined that five A320 and A321 NEO aeroplanes were delivered with a configuration which potentially allows the installation of an affected oxygen pipe.

For the reasons described above, this AD retains the requirements of EASA AD 2017-0150, which is superseded, and extends the applicability to the five A320 and A321 NEO aeroplanes. This AD also corrects the Table in Appendix 1 by removing MSN 5091 which belongs to Group 2.



**Required Action(s) and Compliance Time(s):**

Required as indicated, unless accomplished previously:

**Identification / Replacement:**

- (1) Within the compliance time specified in Table 1 of this AD, as applicable, accomplish the following actions, in accordance with the instructions of the SB.
  - (1.1) Inspect the crew oxygen pipe P/N D3511032000640 to identify the batch number.
  - (1.2) If the batch number of the oxygen pipe is 19356252, 40008586, 40076689, 40187414, 40292749, 40405164, 40649383, 40724994, 40820410, or 40911832, replace the oxygen pipe with a serviceable part.

Table 1 – Oxygen Pipe Identification / Replacement

Aeroplane MSN	Compliance Time
Group 1 aeroplanes	Within 7 500 flight hours (FH) or 26 months, whichever occurs first after 10 December 2013 [the effective date of EASA AD 2013-0278]
Group 2 aeroplanes	Within 7 500 FH or 26 months, whichever occurs first after 30 August 2017 [the effective date of EASA AD 2017-0150]
Group 3 aeroplanes	Within 7 500 FH or 26 months, whichever occurs first after the effective date of this AD

- (2) An aeroplane that has an MSN not identified in Group 1, 2 or 3 is not affected by the requirements of paragraph (1) of this AD, provided it has been determined that no affected crew oxygen pipe has been installed on that aeroplane after 30 June 2011.

A review of the aeroplane maintenance records is acceptable in lieu of the inspection required by paragraph (1.1) of this AD, or to make the determination as specified in paragraph (2) of this AD, as applicable, provided those records can be relied upon for that purpose and the crew oxygen pipe P/N and batch number can be conclusively identified from that review.

**Parts Installation:**

- (3) Do not install an affected part on any aeroplane, as required by paragraph (3.1) or (3.2) of this AD, as applicable:
  - (3.1) For aeroplanes that are not part of Group 3: From 10 December 2013 [the effective date of EASA AD 2013-0278].
  - (3.2) For Group 3 aeroplanes: From the effective date of this AD.

**Credit**

- (4) Inspections and corrective actions, accomplished on an aeroplane before the effective date of this AD in accordance with the instructions of the SB at original issue or Revision 01, are acceptable to comply with the requirements of paragraph (1) of this AD for that aeroplane.



**Ref. Publications:**

Airbus SB A320-35-1069 original issue dated 26 April 2013, or Revision 01 dated 24 March 2014, or Revision 02 dated 26 October 2016.

The use of later approved revisions of the above mentioned document is acceptable for compliance with the requirements of this AD.

**Remarks:**

1. This Proposed AD will be closed for consultation on 07 March 2018.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. For any question concerning the technical content of the requirements in this PAD, please contact: AIRBUS – Airworthiness Office – EIAS; Fax +33 5 61 93 44 51; E-mail: [account.airworth-eas@airbus.com](mailto:account.airworth-eas@airbus.com).



Annex 1 – Group 1 aeroplanes  
(addressed through EASA AD 2013-0278)

Aeroplane MSN													
4987	5041	5053	5060	5069	5077	5085	5093	5103	5111	5118	5126	5134	5144
4997	5042	5054	5062	5070	5078	5086	5094	5104	5112	5119	5127	5135	5146
5013	5045	5055	5063	5072	5079	5087	5095	5105	5113	5120	5128	5136	5148
5014	5047	5056	5064	5073	5080	5088	5096	5106	5114	5122	5129	5137	
5022	5049	5057	5065	5074	5081	5089	5099	5107	5115	5123	5130	5138	
5032	5050	5058	5067	5075	5083	5090	5101	5108	5116	5124	5132	5140	
5039	5052	5059	5068	5076	5084	5092	5102	5109	5117	5125	5133	5143	

