



Notification of a proposal to issue an Airworthiness Directive

PAD No.: 15-145

Issued: 26 November 2015

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:

SAAB AB, AERONAUTICS

Type/Model designation(s):

2000 aeroplanes

Effective Date: dd Month YYYY [standard: 14 days after AD issue date]

TCDS Number(s): EASA A.069

Foreign AD: Not Applicable

Supersedure: None

ATA 38 – Water/Waste – Potable water system – Installation of Shrinkable Tubes as Spray Shields

Manufacturer(s):

Saab AB, Aeronautics (formerly Saab Aerosystems)

Applicability:

Model 2000 aeroplanes, serial numbers (s/n) 017, s/n 019 through 021 inclusive, s/n 027 through 028 inclusive, s/n 030, 034, 040, 050 and 052.

Reason:

An occurrence was reported of rudder pedal restriction on a SAAB 2000 aeroplane with the Large Potable Water System (LPWS) installed, equipped with in-line heaters (options 38:201 and 38:201-1). Subsequent investigation showed that this event was the result of a ruptured in-line heater attachment, causing water leakage at the inlet tubing for the in-line heater in the lower part of the forward fuselage (Zone 116). In flight, the water froze on the rudder control mechanism, causing the rudder pedal restriction. Analysis after the reported event indicates that the pitch control mechanism (including pitch disconnect/spring unit) may also be frozen, which would prevent disconnection and normal pitch control.

This condition, if not corrected, could result in further occurrences of water spray, possibly resulting in reduced control of the aeroplane.



To address this potential unsafe condition, EASA issued Emergency AD 2013-0172-E, to require deactivation of the LPWS. Following that, EASA AD 2013-0172R1 introduced a temporary alternative procedure for filling, reactivation and operation of the LPWS.

Finally, EASA AD 2014-0255 was issued, superseding EASA AD 2013-0172R1, to require a modification allowing reactivating of the system and the use of regular filling procedures.

Although the Basic Potable Water System (BPWS) does not contain an in-line heater, which was the major risk contributor and the actual cause of the previous leakage events in the LPWS, a Zonal Safety Analysis performed by SAAB concluded that the implementation of spray shield (tube/hose) for the water piping is necessary for the BPWS as well, to protect the flight controls and electrical equipment from water spray in case of a failed pipe or coupling during water filling on ground.

Consequently SAAB developed a modification and issued Service Bulletin (SB) 2000-38-012 to provide modification instructions to install shrinkable tubes as spray shields.

For reasons described above, this AD requires installation of shrinkable tubes on the water piping of the BPWS.

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

Required as indicated, unless accomplished previously:

Within 24 months after the effective date of this AD, install shrinkable tubes on the water piping of the BPWS in accordance with the instructions of SAAB SB 2000-38-012.

Ref. Publications:

SAAB SB 2000-38-012 original issue dated 20 August 2015.

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

Remarks:

1. This Proposed AD will be closed for consultation on 24 December 2015.
2. Enquiries regarding this PAD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
3. For any question concerning the technical content of the requirements in this PAD, please contact:
Saab AB, Support and Services,
SE-581 88 Linköping, Sweden
Fax: +46 13 184874
E-mail: saab2000.techsupport@saabgroup.com.

