

EASA	AIRWORTHINESS DIRECTIVE
	AD No.: 2014-0218
	Date: 29 September 2014 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 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, 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].	
Design Approval Holder's Name: SAAB AB, Aeronautics	Type/Model designation(s): SF340A and 340B aeroplanes
TCDS Number: A.068	
Foreign AD: Not applicable	
Supersedure: This AD supersedes EASA AD 2013-0254 dated 18 October 2013.	
ATA 27	Flight Controls – Stall Warning and Identification System / Stall Warning Computer – Modification / Replacement
Manufacturer(s): SAAB AB, Aeronautics (formerly SAAB Aerosystems)	
Applicability:	Model SF340A aeroplanes serial numbers (s/n) 004 through 159 inclusive, and Model 340B aeroplanes s/n 160 through 459 inclusive, except aeroplanes registered in Canada which have been modified in accordance with SAAB AB modification (mod.) No. 2650 and/or mod. No. 2859. Note: This AD does not apply to Model 340B aeroplanes with s/n 170, 342, 362, 363, 367, 372, 379, 385, 395, 405, 409, 431, 441 and 455.
Reason:	A few natural stall events, specifically when operating in icing conditions, have been experienced on SAAB 340 series aeroplanes, without receiving a prior stall warning. This condition, if not corrected, could result in loss of control of the aeroplane. To address this potential unsafe condition, SAAB developed a modified stall warning system, incorporating improved stall warning logic, and issued Service Bulletin (SB) 340-27-098 and SB 340-27-099, providing instructions to replace the Stall Warning Computer (SWC) with a new SWC, and instructions to activate the new SWC. The new system included stall warning curves optimized for operation in icing conditions, which are activated by selection of Engine Anti-Ice. Consequently, EASA issued AD 2011-0219 to require installation of the improved SWC. After that AD was issued, in-service experience with the improved stall warning system revealed cases of premature stall warning activation during the take-off

	phase. In numerous recorded cases, the onset of stall warning occurred without the 6 minute delay after weight off wheels. This condition, if not corrected, could lead to premature stick shaker activation and consequent increase in pilot workload during the take-off phase, possibly resulting in reduced control of the aeroplane. To correct this unsafe condition, EASA issued AD 2013-0254 retaining the requirements of EASA AD 2011-0219, which was superseded, to require deactivation of the ice speed curves in the improved SWC on Saab 340 aeroplanes, in accordance with SAAB SB 340-27-116. Since EASA AD 2013-0254 was issued, SAAB developed a technical solution to eliminate the premature activation of the stall warning ice curves and issued SB 340-27-120 (modification of the existing Stall Warning System installation), SB 340-27-121 (activation of improved SWC for aeroplanes with a basic wing tip) and SB 340-27-122 (activation of improved SWC for aeroplanes with an extended wing tip). SAAB SB 340-27-120 provides modification and installation instructions valid for pre- and post-SB 340-27-097, SB 340-27-098, SB 340-27-099 and SB 340-27-116 aeroplanes. For aeroplanes modified in accordance with SAAB AB mod. No. 2650 and/or mod. No. 2859 which are no longer registered in Canada, SAAB AB issued SAAB AB SB 340-27-109 to provide modification and installation instructions to remove the ice speed curve function. For the reasons described above, this AD retains the requirements of EASA AD 2013-0254, which is superseded, and requires modification of the Stall Warning and Identification System and replacement of the SWC with an improved unit.
Effective Date:	13 October 2014
Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously: Requirements retained from EASA AD 2013-0254: (1) Within 30 days after 25 October 2013 [the effective date of EASA AD 2013-0254], accomplish the following actions, as applicable to aeroplane configuration, in accordance with the instructions of SAAB SB 340-27-116. (1.1) For aeroplanes with basic wing tip that have been modified in accordance with SAAB SB 340-27-098, deactivate the stall speed curves in the SWC part number (P/N) 0020AK6. (1.2) For aeroplanes with extended wing tip that have been modified in accordance with SAAB SB 340-27-099, deactivate the stall speed curves in the SWC P/N 0020AK7. New requirements of this AD: (2) Within 18 months after the effective date of this AD, accomplish the actions as specified in paragraph (2.1) or (2.2) of this AD, as applicable to aeroplane configuration. (2.1) For aeroplanes with a basic wing tip, replace the SWC with SWC P/N 0020AK6-1 in accordance with the instructions of SAAB SB 340-27-121, or (2.2) For aeroplanes with an extended wing tip, replace the SWC with SWC P/N 0020AK7-1 in accordance with the instructions of SAAB SB 340-27-122. (3) Prior to, or concurrent with, modification of an aeroplane as required by paragraph (2) of this AD, modify the Stall Warning and Identification System in accordance with the instructions of SAAB SB 340-27-120 or, for aeroplanes post-mod No 2650 and/or post-mod 2859, SB 340-27-109, as applicable for aeroplane configuration. (4) After modification of an aeroplane as required by paragraph (2) of this AD,

	do not install any SWC P/N 0020AK, or P/N 0020AK1, or P/N 0020AK2, or P/N 0020AK4, or P/N 0020AK3 MOD 1 P/N 0020AK6, or P/N 0020AK7 on that aeroplane.
Ref. Publications:	SAAB SB 340-27-098 original issue dated 01 September 2011. SAAB SB 340-27-099 original issue dated 01 September 2011. SAAB SB 340-27-116 original issue dated 18 October 2013. SAAB SB 340-27-120 original issue dated 11 July 2014. SAAB SB 340-27-121 original issue dated 11 July 2014. SAAB SB 340-27-122 original issue dated 11 July 2014. SAAB SB 340-27-109 original issue dated 14 April 2014. 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. This AD was posted on 21 July 2014 as PAD 14-118 for consultation until 18 August 2014. The Comment Response Document can be found at http://ad.easa.europa.eu. 3. Enquiries regarding this AD should be referred to the Safety Information 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: Saab AB, Support and Services SE-581 88 Linköping, Sweden Fax: +46 13 184874 E-mail: saab340.techsupport@saabgroup.com.