## EASA

## **AIRWORTHINESS DIRECTIVE**

## AD No.: 2014-0190



## Date: 29 August 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].

ALEXANDER SCHLEICHER GmbH & CO Segelflugzeugbau Type/Model designation(s): ASW 22 sailplanes

TCDS Number: EASA.A.217

Foreign AD: Not applicable

Supersedure: None

ATA 27	Flight Controls – Elevator Control System – Inspection / Modification
Manufacturer(s):	Alexander Schleicher GmbH & Co. Segelflugzeugbau (Schleicher)
Applicability:	ASW 22, ASW 22 B and ASW 22 BL sailplanes, all manufacturer serial numbers.
Reason:	An occurrence of flutter, involving elevator control and horizontal stabilizer, we reported on a ASW 22 sailplane which had exceeded 7 000 flight hours (FH). The subsequent investigation determined that an aging phenomenon of affected control circuit structural elements led to a reduction of control stiffness. As a result, coupling of the reduced natural frequency of the affected control circuit stabilizer frequency generated a flutter phenomenor.
	This condition, if not detected and corrected, could lead to horizontal stabilize and/or elevator flutter, possibly resulting in reduced control of the sailplane.
	To address this potential unsafe condition, Schleicher issued Technical Note (TN) 17 ASW 22 to provide inspection instructions and developed a modification "Modification to increase the control stiffness of the ASW22 elevator control system".
	For the reasons described above, this AD requires a one-time inspection and modification of the elevator control system.
Effective Date:	12 September 2014

Required Action(s) and Compliance Time(s):	Required as indicated, unless accomplished previously:
	(1) For sailplanes which, on the effective date of this AD, have accumulated less than 3 000 FH: before exceeding 3 000 FH since first flight of the sailplane, inspect the stiffness of the elevator control system in accordance with the instructions of Schleicher TN 17 ASW 22.
	(2) If, during the inspection as required by paragraph (1) of this AD, a stiffness of the elevator control system equal to or more than 27 % is detected (i.e. stiffness reduction detected), before next flight, modify the elevator control system in accordance with the instructions of Schleicher "Modification to increase the control stiffness of the ASW22 elevator control system".
	(3) Before exceeding 6 000 FH since first flight of the sailplane, unless accomplished as required by paragraph (2) of this AD, modify the elevator control system in accordance with the instructions of Schleicher "Modification to increase the control stiffness of the ASW22 elevator control system".
	(4) For sailplanes which, on the effective date of this AD, have accumulated or exceeded 6 000 FH since first flight of the sailplane, within 12 months after the effective date of this AD, modify the elevator control system in accordance with the instructions of Schleicher "Modification to increase the control stiffness of the ASW22 elevator control system".
Ref. Publications:	Schleicher TN 17 ASW 22 dated 27 February 2014,
	Schleicher "Modification to increase the control stiffness of the ASW22 elevator control system", dated 02 December 2013.
	The use of later approved revisions of these documents is acceptable for compliance with the requirements of this AD.
Remarks:	<ol> <li>If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.</li> </ol>
	<ol> <li>This AD was posted on 21 July 2014 as PAD 14-117 for consultation until 18 August 2014. The Comment Response Document can be found at <u>http://ad.easa.europa.eu</u>.</li> </ol>
	<ol> <li>Enquiries regarding this AD should be referred to the Safety Information Section, Executive Directorate, EASA. E-mail: <u>ADs@easa.europa.eu</u>.</li> </ol>
	<ol> <li>For any question concerning the technical content of the requirements in this AD, please contact: Alexander Schleicher GmbH &amp; Co. Segelflugzeugbau, Germany Telephone: +49 (0) 06658 89-0 Fax: +49 (0) 06658 89-40. E-mail: <u>info@alexander-schleicher.de</u>.</li> </ol>