1 of 2

ASK 21 ASK 21 Mi Technical NoteNo. 39Technical NoteNo. 13

Subject:	Modified brake fluid expansion tank
----------	-------------------------------------

Applicability: ASK 21; Type-Certificate EASA.A.221 Models ASK 21 and ASK 21 Mi; all serial numbers

Classification: Minor Change

Urgency: optional

Reason: Product improvement

In case of a low brake fluid level in the existing expansion tank air might enter the brake system during intense aerobatic training including frequent inverted flight<sup>1</sup>, resulting in reduced brake power. A new expansion tank design implements a completely closed brake system avoiding this behaviour.

Action:

Exchange of the existing expansion tank and its mounting; Removal of the small vent line



Glue the new mounting (item 1) on the fuselage shell using thickened resin. Position the expansion tank upright as possible and in a way that it is visible through the window in the seat pan. Watch the clearance between the airbrake controls and the outgoing hose. Close the remaining rivet holes of the old mounting with thickened resign.

Note on Filling: Fill the expansion tank nearly to full capacity and insert the diaphragm (item 3). Collect the waste brake fluid at the same time. It should be no air underneath the diaphragm anymore. Finally fasten the filler cap. The volume compensation (temperature, wear) is solely done via the diaphragm, the brake system itself is completely closed.

Exchange of the following manuals in the maintenance manual: ASK 21 Mi: 2.19 ASK 21: 19 or 23 (US manual) 2 of 2

Material:

210.11.9051 Overview expansion tank installation ÄM 6

Mass and Balance:

ance: The change in mass and C. of G. position is negligible.

**Notes:** The structural measures must only be accomplished by the manufacturer Alexander Schleicher or by a maintenance organisation according to European Union Commission Regulation (EC) 1321/2014 Part M / Section A / Subpart F.

All actions are to be inspected by certifying staff according to European Union Commission Regulation (EC) 1321/2014 Part M / Part 66 in the scope of a modification and have to be certified in the sailplane inspection documents and in the sailplane logbook. The change to the manual is considered being eligible for release by the Pilot-owner pursuant to M.A.801(b)3 and must be entered on the page "Record of Revisions" and in the "List of effective pages".

In countries outside the scope of EC 1321/2014 the corresponding national rules shall apply.

Poppenhausen, 01.08.2017

**Alexander Schleicher** 

GmbH & Co. i.A. P. A

A. (P. Anklam)

This Technical Note bases on a change, which was approved by EASA under the minor change approval EASA 10058167.