

**Subject:** Wheel Brake Lever on the Stick

**Applicability:** ASK 21, Type-Certificate EASA.A.221  
variants ASK 21 und ASK 21 Mi; all serial numbers

**Classification:** Minor Change

**Urgency:** Optional

**Reason:** Product improvement

Improvement of the handling during taxiing. Two solutions for a wheel brake on the front control stick are already provided by TN 2 and TN 6 of the ASK 21 Mi. The solution of TN 2 works with a Bowden cable having a lower efficiency. The solution of TN 6 is hydraulic, but not suitable for longer inverted flight periods. Both disadvantages were covered by a modified hydraulic solution. In addition the parallel actuation of the wheel brake via the brake lever at the stick and the master cylinder (airbrakes) is improved.

**Action:** There are two requirements for the installation: At the front seat

- a smaller instrument panel (equal to ASH 25) must be installed (serial standard for the ASK 21 Mi)
- a straight control stick must be installed (not pitched forward)

A hydraulic brake lever is installed on the front control stick. This needs a bypass function and must be adopted to the hydraulic ratio of the calliper (e.g. master cylinder HBGD, company TOST). The hydraulic line leads from the master cylinder to the brake lever on the stick and from this to the calliper, instead of the former direct connection of master cylinder and calliper.

The trim lever is replaced by a lever according to drawing 210.49.0011.

Make sure that:

- The brake lever does not interfere with the instrument panel or the engine control levers (in all possible positions), especially in the foremost stick position.
- The trim lever does not interfere with the brake lever.
- The mounting of the brake lever fits on the tube diameter of the stick (Ø24 mm).
- The freedom of movement of the control system is not impaired by the brake hoses.

ASK 21 Mi:

The supplement „F Wheel brake lever on the stick“ (2 pages, Issue TN 12 / 29.03.16) is appended to section 9 of the flight manual. The list of inserted supplements on page 9.2 has to be updated accordingly.

ASK 21:

The supplement „Wheel brake lever on the stick“ (2 pages, Issue TN 37 / 29.03.16) is appended to the flight manual. The amendments record has to be updated accordingly.

**Material and Drawings:** 210.11.9050 Overview Installation Wheel Brake Lever ÄM 6

**Mass and Balance:** A new weighing has to be made.

**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.

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

Poppenhausen, 29.03.2016

**Alexander Schleicher**

GmbH & Co.

i.A. 

(P. Anklam)

This modification has been approved by the EASA at the date of the 19.05.2016 with the Minor Change Approval 10058167.