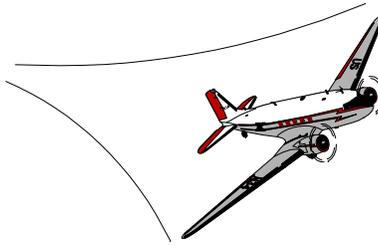


# SPECIAL AIRWORTHINESS INFORMATION BULLETIN



U.S. Department  
of Transportation  
**Federal Aviation  
Administration**

AIRCRAFT CERTIFICATION SERVICE  
800 INDEPENDENCE AVENUE, S.W.  
WASHINGTON, DC 20591

No. ACE-98-07  
November 12, 1997

Published by: FAA, AFS-610, P.O. Box 26460, Oklahoma City, OK 73125

This is issued for informational purposes only and any recommendation for corrective action is not mandatory.

The purpose of this Special Airworthiness Information Bulletin (SAIB) is to provide safety information to Alexander Schleicher Model ASK-21 sailplane owners on the following:

- Flexible Toe Straps Causing Rudder to Jam (Technical Note No. 5a)
- Tow Rope Release Mechanism (Technical Note No. 10) [See Note 1]
- Inaccurate Weight and Balance Information (Technical Note No. 13a) [See Note 1]
- Slippage of Rudder Pedal Plastic Tubes (Technical Note No. 20) [See Note 1]
- Cracks in the Rear Canopy Hinge Structure (Technical Note No. 20) [See Note 1]
- Concentrated Cracks in the Airbrake Bellcrank (Technical Note No. 20) [See Note 1]
- Change/Supplement to the Flight and Maintenance Manuals (Technical Note No. 20)
- Flight Manual Revision for Spins (Technical Note No. 23) [See Note 1]
- Increase Service Life/Maintenance Manual Revision (Technical Note No. 24)
- Corrosion In the Elevator Pushrod (Technical Note No. 26) [See Note 1]

*NOTE 1: Possible Airworthiness Directive actions are currently being evaluated for these selected service difficulty issues.*

## **Background**

The FAA is currently conducting an assessment of foreign airworthiness directives that have been issued by the German Luftfahrt-Bundesamt (LBA) on German type certificated sailplanes. The LBA has issued German airworthiness directives on the service difficulty issues listed above. The FAA is currently assessing the need to issue a corresponding U.S. airworthiness directive on U.S. type certificated Model ASK-21 sailplanes. In the interim, the FAA is using this Special Airworthiness Information Bulletin to inform U.S. owners of this model sailplane of the service difficulties reported by the manufacturer. If an airworthiness directive is determined to be appropriate, a Notice of Proposed Rulemaking will be issued. The following is a brief description of the main areas of each issue.

### **Flexible Toe Straps Causing Rudder to Jam (Technical Note No. 5a)**

Alexander Schleicher has determined that there has been service history that has shown that the flexible toe straps may cause jamming in the rudder control. To eliminate this possibility, Alexander Schleicher has issued Technical Note No. 5a that requires installation of rigid steel straps instead of the flexible straps. For your information, LBA Airworthiness Directive 81-92 is enclosed as well as Alexander Schleicher Technical Note No. 5a. The FAA highly encourages you to ensure that this modification has been accomplished on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately two hours to accomplish. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$100.00 U.S. dollars.

**Tow Rope Release Mechanism (Technical Note No. 10)**

Alexander Schleicher has determined that there has been several occurrences where the tow release cable formed a loop resulting in a loss of tow release capability. To eliminate this possibility, Alexander Schleicher has issued Technical Note No. 10 that requires replacement of the original cable assembly with a new cable assembly that has a swivel type end. For your information, LBA Airworthiness Directive 84-2 is enclosed as well as Alexander Schleicher Technical Note No. 10. The FAA highly encourages you to accomplish this modification, on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately two hours to accomplish. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$20.00 U.S. dollars.

**Inaccurate Weight and Balance Information (Technical Note No. 13a)**

Alexander Schleicher has determined that there was inaccurate conversion information in the flight manual weight and balance section. This inaccurate information may lead to loading of the sailplane outside of the approved center of gravity. To resolve this discrepancy, Alexander Schleicher has issued Technical Note No. 13a that requires an amendment to the flight manual and increasing the number of trim weights. For your information, LBA Airworthiness Directive 84-32/2 is enclosed as well as Alexander Schleicher Technical Note No. 13a. The FAA highly encourages you to comply with this technical note on your sailplane, if applicable. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately five hours to accomplish. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$150.00 U.S. dollars for the trim weights and no cost for the flight manual revision.

**Slippage of Rudder Pedal Plastic Tubes (Technical Note No. 20)**

Alexander Schleicher has determined that there had been an occurrence where the plastic tubes within the rudder pedals had slipped out resulting in limiting the travel of the rudder pedals. To eliminate this possibility, Alexander Schleicher has issued Technical Note No. 20 that requires gluing the tubes in place. For your information, LBA Airworthiness Directive 88-2 is enclosed as well as Alexander Schleicher Technical Note No. 20. The FAA highly encourages you to determine if this modification has been accomplished on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately two hours to accomplish the modification. A locally purchased adhesive is acceptable for this modification at a cost of approximately \$5.00 U.S. dollars.

**Cracks in the Rear Canopy Hinge Structure (Technical Note No. 20)**

Alexander Schleicher has determined that there have been occurrences where wind conditions have damaged the canopy hinge structure on the ground, when the canopy was left open. Damage to this area can cause potential loss of the canopy during flight. To resolve this potential, Alexander Schleicher has issued Technical Note No. 20, action 4, that requires inspection of the rear canopy structure and reinforcement if damage is determined. For your information, LBA Airworthiness Directive 88-2 is enclosed as well as Alexander Schleicher Technical Note No. 20 and the associated drawings. The FAA highly encourages you to determine if this modification has been accomplished on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately one hour to conduct the inspection and ten hours to accomplish the modification. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$15.00 U.S. dollars for the reinforced doubler.

**Concentrated Cracks in the Airbrake Bellcrank (Technical Note No. 20)**

Alexander Schleicher has determined that there have been two occurrences where cracks have been found in the airbrake bellcrank in the fuselage. To eliminate this possibility, Alexander Schleicher has issued Technical Note 20, action 3, that requires inspection and exchange of the airbrake bellcrank assembly. For your information, LBA Airworthiness Directive 88-2 is enclosed as well as Alexander Schleicher Technical Note No. 20 and the associated drawings. The FAA highly encourages you to determine if this inspection has been accomplished on your sailplane. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$200.00 U.S. dollars for the bellcrank assembly.

**Change/Supplement to the Flight and Maintenance Manuals (Technical Note No. 20)**

Alexander Schleicher has developed new inspection and assembly instructions. A revision to the Flight and Maintenance Manuals have been accomplished. For your information Alexander Schleicher Technical Note No. 20, section 2, with the applicable revision pages, are included. The FAA highly encourages you to comply with this section of Technical Note No. 20.

**Flight Manual Revision for Spins (Technical Note No. 23)**

The United States Air Force conducted an extensive flight test program to evaluate the stall, poststall, and spin characteristics of the Model ASK-21. The Air Force concluded that the stall and spin characteristics of the ASK-21 were satisfactory and similar to those of other high performance sailplanes. The Air Force did have the following safety findings: The current ASK-21 manufacturer's flight manual provided by the manufacturer does not accurately document the spin susceptibility. Additionally, the manual does not adequately document the stall and spin characteristics. Alexander Schleicher has developed a revision to the Flight Manual incorporating recommendations from the Air Force flight test program in Technical Note No. 23. For your information, LBA AD 91-112 and Alexander Schleicher Technical Note No. 23, with the applicable revision pages, are included. The FAA highly encourages you to comply with this section of Technical Note No. 23.

**Increase Service Life/Maintenance Manual Revision (Technical Note No. 24)**

Alexander Schleicher has developed Technical Note No. 24 that increases the service life of the ASK-21 to 12,000 hours. For your information, LBA Airworthiness Directive 94-026 is enclosed as well as Alexander Schleicher Technical Note No. 24, with the applicable maintenance manual revisions.

**Corrosion In the Elevator Pushrod (Technical Note No. 26)**

Alexander Schleicher has determined through service history of similar type designs that corrosion of the elevator pushrod is possible under unfavorable conditions. To eliminate this possibility, Alexander Schleicher has issued Technical Note No. 26 that requires the inspection and replacement, if necessary, of the elevator pushrod. For your information, LBA Airworthiness Directive 93-186 is enclosed as well as Alexander Schleicher Technical Note No. 26. The FAA highly encourages you to determine if this modification has been accomplished on your sailplane. If this modification has not been accomplished, the manufacturer has estimated that it will take approximately one hour to conduct the inspection and two hours to accomplish the modification. Alexander Schleicher has the parts available to accomplish this modification. The cost is approximately \$160.00 U.S. dollars for the pushrod assembly or \$20.00 for the rod end.

**Additional Information**

The FAA has issued the following Airworthiness Directives (AD) on the Alexander Schleicher Model ASK-21. This information is provided to you for your information only.

- AD 84-23-03; To remove a German placard and install an English equivalent placard. Revise the Flight Manual and Maintenance Manual per Technical Note No. 14.
- AD 85-06-07; Accomplish Technical Note No. 17 to prevent the main wheel fairing from causing structural damage to the fuselage wheel well box cutout and loosening the rib during hard landings.
- AD 87-10-07; To prevent rudder structural support failure, accomplish Technical Note No. 19.
- AD 95-11-15; Accomplish Technical Note No. 22, to prevent possible loss of the elevator control.

**Further Information Contact:**

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