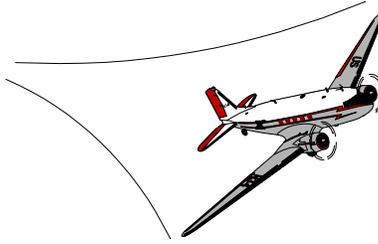


# SPECIAL AIRWORTHINESS INFORMATION BULLETIN



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

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

No. ACE-98-43  
July 30, 1998

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 Grob Flugzeugbau Models G 109 and G 109B sailplane owners/operators on the following:

- Model G 109 - Correction to Flight Manual; Service Bulletin TM 817-8
- Model G 109 - Extension of the Flight and Maintenance Manual; Service Bulletin TM 817-22
- Models G 109 and G 109B - Exchange of the Sealing Piston in the Fire Cock Service Bulletin TM 817-23/1
- Models G 109 and G 109B - Extension of Service Life; Service Bulletin TM 817-28/1
- Models G 109 and G 109B - Inspection of the Exhaust System; Service Bulletin TM 817-32
- Model G 109B - Inspection of the BENDIX-Magnetos; Service Bulletin TM 817-34/2
- Model G 109B - Inspection of Drain Holes in the Elevator; Service Bulletin TM 817-35  
*Reference Note]*
- Models G 109 and G 109B - Main Undercarriage Legs Inspection; Service Bulletin TM 817-39  
*Reference Note]*
- Model G 109B - Inspection of the Engine Mounting Frame; Service Bulletin TM 817-45  
*Reference Note]*

*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 corresponding United States (U.S.) airworthiness directives on U.S. type certificated Grob Models G 109 and G 109B sailplanes. In the interim, the FAA is using this SAIB to inform U.S. owners/operators of these model powered sailplanes 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 above noted Service Bulletins and applicable information are included with this SAIB for your information. The following is a brief description of the main areas of each issue.

## **Correction to Flight Manual; Service Bulletin TM 817-8**

Grob-Werke issued Service Bulletin TM 817-8 which provides corrections to the Model G 109 Sailplane Flight Manual.

**Extension of the Flight and Maintenance Manual; Service Bulletin TM 817-22**

Grob-Werke issued Service Bulletin TM 817-22 which provides additional information for the Model G 109 Sailplane Flight and Maintenance Manuals.

**Exchange of the Sealing Piston in the Fire Cock Service Bulletin TM 817-23/1**

Grob-Werke issued Service Bulletin TM 817-23 which specifies an inspection and exchange of a lower sealing ring in the fuel shut-off valve. Grob subsequently issued revision 1 to this service bulletin after further improvements were accomplished to the sealing piston. Grob sent the new sealing piston to all G 109 and G 109B owners for exchange. The FAA recommends that you check your maintenance historical records to determine that TM 817-23/1 has been accomplished on your aircraft. Grob has the improved sealing pistons in stock at no charge if this modification has not been accomplished. Grob estimates that it takes approximately 1 hour to replace this part.

**Extension of Service Life; Service Bulletin TM 817-28/1**

Grob-Werke issued Service Bulletin TM 817-28/1 which extends the service life of the Models G 109 and G 109B to 12,000 hours. The FAA recommends owner/operators comply with specific sections of this service bulletin for service life extension at 3000 flight hours.

**Inspection of the Exhaust System; Service Bulletin TM 817-32**

Grob-Werke issued Service Bulletin TM 817-32 which requires the inspection of the engine exhaust system. The FAA did not issue a corresponding U.S. AD because this service issue should be adequately addressed during routine maintenance. We have included this service bulletin for your review in view of the manufacturer's concern.

**Inspection of the BENDIX-Magnetos; Service Bulletin TM 817-34/2**

Grob-Werke issued Service Bulletin TM 817-34/2 which specifies procedures for the inspection of the BENDIX magnetos for adequate clearance between the flyweights and the stop pin. This Service Bulletin also requires checking the axle wear of the riveted flyweights per Teledyne Continental Mandatory Service Bulletin 599D.

**Inspection of Drain Holes in the Elevator; Service Bulletin TM 817-35**

Grob-Werke issued Service Bulletin TM 817-35 which specifies the procedures for an inspection of the elevator and trim tab for sufficient number of drain holes and to ensure that the holes are not clogged. SB 817-35 depicts the drain hole size and location. If the drain holes are not in the correct location or clogged, water can accumulate in the elevator/trim tab resulting in potential delamination of the structure and a condition conducive to flutter. The FAA is currently evaluating this service issue for a potential Airworthiness Directive. In the interim, the FAA highly recommends you ensure that this Service Bulletin has been complied with on your sailplane.

**Main Undercarriage Legs Inspection; Service Bulletin TM 817-39**

Grob-Werke issued Service Bulletin TM 817-39 which specifies procedures for an inspection of the main landing gear legs. The Service Bulletin requires compliance after 2,000 landings and every 1,000 subsequent landings. There is no requirement to log landings by operators in the U.S., therefore, the FAA is proposing that this inspection be accomplished after 1,000 hours time in service and every 500 subsequent hours. The FAA issued a Notice of Proposed Rulemaking (NPRM) on February 19, 1996, however, a Final Rule was not issued due to a technical misunderstanding by the FAA on a particular section of the Service Bulletin. The FAA is currently reissuing the NPRM for comments by the public. The FAA will coordinate with the Soaring Society of America (SSA) to have the NPRM listed in their internet site when it is issued in

the Federal Register. In the interim, if your sailplane has or will accumulate 1,000 hours, the FAA highly recommends that you comply with this SB.

### **Inspection of the Engine Mounting Frame; Service Bulletin TM 817-45**

Grob-Werke issued Service Bulletin TM 817-45 which specifies the procedures for an inspection of the #3 tube on the engine mount frame for chaffing damage. Grob has established a maximum damage criteria 0.7mm abrasion depth. If there is no damage -- no action is required. If the damage is less than 0.7mm, local repair per the SB is authorized. If the damage exceeds 0.7mm, the entire mount frame should be removed and sent to the manufacturer for repair, or a new engine mount frame may be installed. The FAA is currently evaluating this service issue for potential AD action. In the interim, the FAA highly recommends that you ensure that this Service Bulletin has been complied with on your sailplane.

### **Additional Information**

The FAA has issued the following Airworthiness Directives (AD) on the Grob Flugzeugbau Models G 109 and G 109B. This information is provided to you for your information only.

- AD 85-19-05; Prohibition on Spinning Maneuver.
- AD 85-19-07R1; Main Landing Gear Legs.
- AD 86-15-09; Prevention of Aileron Flutter.
- AD 91-12-06; Root Rib Stud Plate Inspection.
- AD 94-17-06; Airbrake Stops/ Repair of Gelcoat.
- AD 95-08-13; Elevator Inner Hinges.
- AD 97-15-12; Prevent Rudder Vibration.

### **Further Information Contact:**

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