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

Small Airplane Directorate
901 Locust, Room 301
Kansas City, Missouri 64110

JAN 09 2013

Ronald Schwenninger
3247 Hampton Oaks Drive
Allison Park, PA 15101

Subject: Global Alternative Method of Compliance (AMOC) request for Airworthiness Directive (AD) 2012-10-11, Docket No. FAA-2012-0324; Directorate Identifier 2012-CE-008-AD for the Burkhart GROB Luft- und Raumfahrt GmbH Model G 109 and G 109B Powered Sailplanes.

Dear Mr. Schwenninger:

This is in response to your letter dated January 03, 2013, to Mr. Jim Rutherford, Aerospace Engineer, FAA Small Airplane Directorate, requesting a new Global AMOC for use of an alternative inspection method to accomplish the requirements of paragraphs (f)(1)(ii) and (f)(1)(iii) of AD 2012-10-11. You also request that the FAA extend the compliance time for paragraphs (f)(1)(ii) and (f)(1)(iii) of the AD. Since these requests are applicable to all affected G 109 and G 109B powered sailplanes, you ask that this AMOC be allowed for use by all operators.

AD 2012-10-11 originally required all actions to be accomplished, unless already done, within 3 months after July 09, 2012 (the effective date of this AD). Based upon a previous FAA acceptance of a time extension Global AMOC request, the current compliance deadline for paragraphs (f)(1)(ii) and (f)(1)(iii) of the AD is January 09, 2013.

Paragraph (f)(1)(ii) requires the installation of an access panel on the left side of the vertical stabilizer following Grob Aircraft Repair Instruction Doc. No. RI817-010/1, issue date December 20, 2011, as specified in Grob Aircraft Service Bulletin (S/B) No. MSB817-060, dated November 24, 2011. Paragraph (f)(1)(iii) requires use of the access panel hole to accomplish an inspection, from below, of the vertical stabilizer nose plate for corrosion and flaking following Part B of the Accomplishment Instructions in Grob Aircraft S/B No. MSB817-58, dated November 24, 2011. Thereafter, the inspection is to be repeated at intervals not to exceed 12 months.

You are requesting that the inspection defined in paragraph (f)(1)(iii) be accomplished through a much smaller diameter opening than what is specified in paragraph (f)(1)(ii), by the use of a small diameter, flexible, self-illuminating inspection camera. This alternative inspection is defined in Attachment 1 to this letter. In order to allow time for FAA consideration of this request and for implementation of this alternative inspection method, if accepted by the FAA, you have also requested that the current compliance deadline of January 09, 2013 be extended by three months to April 09, 2013 for paragraphs (f)(1)(ii) and (f)(1)(iii) of the AD.

As justification for allowing this alternative inspection method, you state that you accomplished an inspection of a model G 109B using both a mirror as specified in the AD and a flexible, inspection camera. You conclude that the flexible, inspection camera provides a better examination than the mirror in this particular application due to limitations imposed by the geometry of the 110 mm opening relative to the position of the nose plate when using a mirror. In addition, for operators that do not currently have an access hole, you provide the costs associated with installing this opening including parts, labor, and transportation costs to get the sailplane to an approved shop where the work can be performed.

As justification for extending the compliance due date by an additional three months, you state that no corrosion was found following the inspection on your glider, registration number N109BR, according to paragraph (f)(1)(i) of AD 2012-10-11. This inspection, which was accomplished prior to the original compliance deadline of October 09, 2012, was done to the top, front and rear sides of the vertical stabilizer nose plate, following Part A of the Accomplishment Instructions in Grob Aircraft S/B No. MSB817-58.

The FAA has reviewed your Global AMOC request and the substantiation that you have provided. Since our office is responsible to coordinate such proposals with the state of design authority and the type certificate (TC) holder, we shared this request by e-mail with the European Aviation Safety Agency (EASA), and with Grob Aircraft AG. The EASA Project Certification Manager for Grob Aircraft kindly provided a quick response due to the urgent nature of this request. Based on his discussions with Grob Aircraft, he stated that neither he nor Grob Aircraft had any objections to the use of the alternative inspection method you have proposed. He also stated that Grob Aircraft had tried a similar inspection method and found it acceptable for addressing the unsafe condition.

After further consideration within the Small Airplane Directorate, the FAA agrees with your request to use an alternative inspection method, as defined in Attachment 1, to accomplish the requirements of paragraphs (f)(1)(ii) and (f)(1)(iii) of AD 2012-10-11. After initial accomplishment, this alternative inspection method will need to be repeated at intervals not to exceed 12 months as specified in paragraph (f)(1)(iii). The FAA also agrees to extend the compliance due date to April 09, 2013 for paragraphs (f)(1)(ii) and (f)(1)(iii) of the AD, provided that the operator has previously completed the inspection from paragraph (f)(1)(i) with no adverse findings.

Before using this AMOC, operators are to notify their appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. This approval is subject to the following conditions:

1. The Small Airplane Directorate will revoke this AMOC, if we later determine that this AMOC does not provide an acceptable level of safety.

2. All provisions of AD 2012-10-11 that are not specifically referenced above remain fully applicable and must be complied with accordingly.

3. A copy of this letter is kept with the aircraft logbook.

If all the above conditions are met, this AMOC is granted for all affected Grob G 109 and G 109B powered sailplanes, certificated in any category.

This AMOC is transferable.

If you have any questions or require additional information, please contact Mr. Jim Rutherford by telephone at 816-329-4165, by fax at 81-329-4090, or by email at jim.rutherford@faa.gov.

Sincerely,

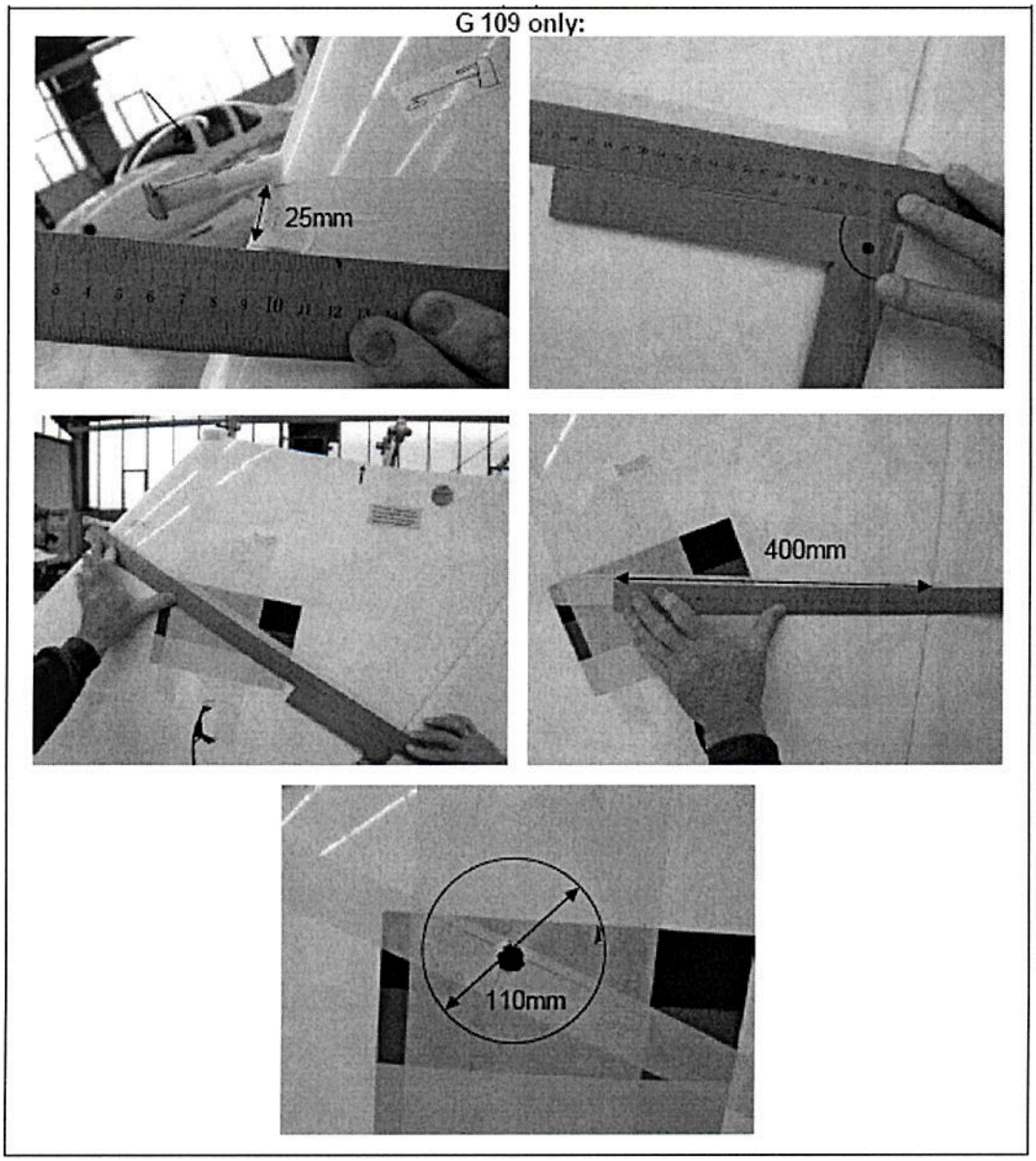
William J. Timberlake
Manager, Project Support Branch

cc:

Mr. Ullrich Kopp
Luftfahrt-Bundesamt
T321 Segelflugzeuge und Motorsegler
Hermann-Blenk-Strasse 26
D-38108 Braunschweig
Germany

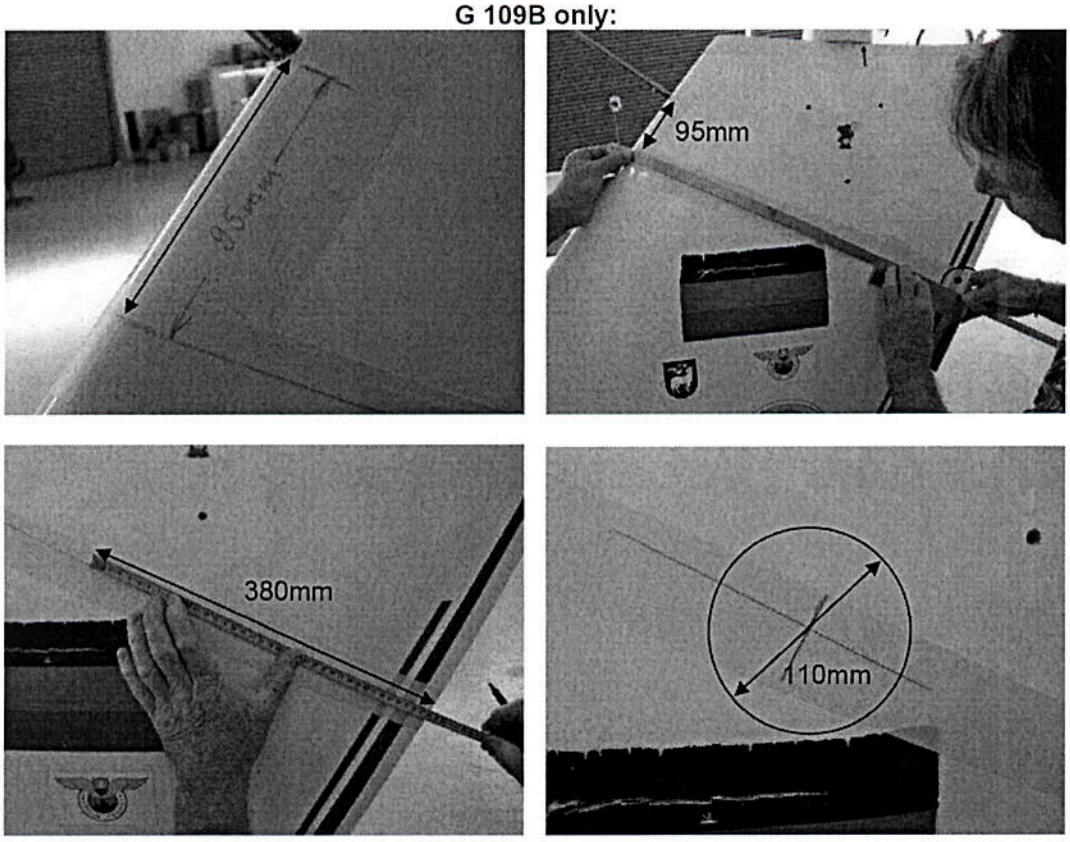
ATTACHMENT 1
Global AMOC - Alternative Inspection Method
AD 2012-10-11, Paragraphs (f)(1)(ii) and (f)(1)(iii)
Dated 01/03/13

1. Make a 16 mm diameter hole anywhere within the boundary of the 110 mm inspection opening defined in Grob Aircraft Repair Instruction Doc. No. RI 817-010/1, issue date December 20, 2011, as specified in Grob Aircraft Service Bulletin MSB817-60, dated November 24, 2011. Picture 1 shows the layout of the 110 mm opening on the model G 109. Picture 2 shows the layout of the 110 mm opening on the model G 109 B. Picture 3 shows a typical example of the 16 mm hole placement.

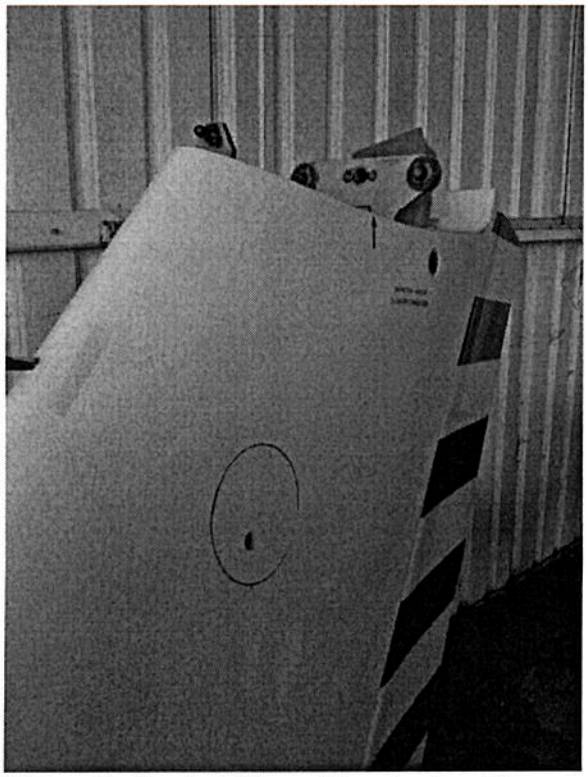


Picture 1 – G 109 110 mm Opening Location

G 109B only:



Picture 2 – G109B 110 mm Opening Location



Picture 3 – Typical 16 mm Opening Location

2. To strengthen and seal this 16 mm hole, remove the foam layer between the inner and outer layers of fiber glass to a radial depth of a minimum of 6 mm and fill this emerging gap with cotton flock resin. With the exception of the smaller dimension of foam removal (6 mm vs. 15 mm), this step is similar to step 7.2 of Grob Aircraft Repair Instruction Doc. No. RI 817-010/1, issue date December 20, 2011, as specified in Grob Aircraft Service Bulletin MSB817-60, dated November 24, 2011.

3. Allow the cotton flock resin to cure.

4. Perform the inspection, from below, of the nose plate, part number 109-2160.01, for corrosion and flaking following Part B of the Accomplishment Instructions in Grob Aircraft Service Bulletin MSB817-58, dated November 24, 2011, with the exception of inserting a flexible, self-illuminating camera into the 16 mm opening as opposed to using a mirror through the larger 110 mm opening. The camera should have a minimum resolution / image capture of 640 X 480 pixels. It should have a diameter small enough to fit through the 16 mm diameter hole and should have sufficient length to reach from the 16 mm hole to the immediate proximity of the nose plate. The camera should be positioned such that the inspection area is well illuminated and in-focus.

5. After completing the inspection of the nose plate following Part B of the Accomplishment Instructions in Grob Aircraft Service Bulletin MSB817-58, dated November 24, 2011, cover the 16 mm hole with seal tape as used commonly for sealing the wing roots and other assembly intersections on sail planes.