

BRITISH MICROLIGHT AIRCRAFT ASSOCIATION SERVICE BULLETIN

Reference: BMAA Service Bulletin 1918 Issue 3

Title: Mandatory Inspection following fatal accident in Norway **Applicability**: All UK MXP-740 Savannah Classic and Savannah VG aircraft

Author: Adrian Jones, Design Approval Engineer, BMAA

Effective date: 29 December 2010

Classification: Mandatory (mandated by UK CAA Mandatory Permit Directive)

1. Introduction

1.1. Why has this service bulletin been issued?

This BMAA Service Bulletin was originally issued in response to a fatal air crash of an ICP Savannah that occurred in Norway on Wednesday 29 June 2005 - the crash was caused by the detachment of one wing from the fuselage.

A review of the aircraft's history was carried out by the Norwegian authorities and found that for approximately two years the aircraft had been tethered down outside by its wing struts and exposed to the harsh conditions of the Norwegian weather: this appears to have had an adverse effect upon the structure of the aircraft and it is likely that there were cracks in the lift strut attachment plates (of which the owner was aware) prior to the flight.

Subsequently, an owner of a UK Savannah discovered fretting between the same attachment plates and adjacent structure. This may in part have been due to the aircraft being tethered outside.

More recently, during an annual inspection of another UK Savannah, a BMAA inspector discovered severe inter-granular corrosion of the attachment plates. (See Appendix A Photo 1). This should normally have been picked up by the pre-flight checks. This aircraft was also tethered outside.

This Service Bulletin Issue 3 now mandates those inspections noted at Issue 2, which must be implemented within one month of the effective date of issue and thereafter every 6 months or 50 hours, whichever is sooner.

1.2. What parts are affected?

The parts of the aircraft affected by this bulletin are the attachment plates of the front wing lift struts to the wing main spar (both sides).

1.3. What documents are affected?

HADS HM10 is updated to include reference to this Service Bulletin.

2. **Qualifications**

2.1. Who may implement this Service Bulletin?

This BMAA Service Bulletin may be implemented by the owner / operator or their employee.

2.2. Where must record be made of the SB?

An entry should be made in the aircraft's logbook stating that "BMAA Service Bulletin 1918 Issue 3 (Inspection of wing lift strut attachment plates) has been carried out", along with the name, qualification and signature of the person incorporating the Service Bulletin.

3. What is required to implement this SB?

3.1. List of Parts Required

None

3.2. List of Equipment Required

Bright electrical torch 10x Magnifier

3.3. Inspection Requirements

As noted in section 4.

4. How to incorporate this Service Bulletin

A close visual examination of the lift strut attachment plates and bolts that connect the wing main spar to the front strut for evidence of possible cracks, fissures, fretting, deformations, corrosion or oxidation should be carried out within one month of the effective date of issue. The inspection must be carried out upon both wings, using a magnifier and bright torch as aids. Both the section of the attachment plate that is inside the wing (as highlighted in Appendix A Photo 5) and the section of the attachment plate that is outside the wing must be inspected thoroughly, along with the sections to which the plate is attached and the fixings with which it has been attached.

Attention should be paid to the areas marked on the photographs to be found in Appendix A. A particular point to check is the wing lift strut attachment plates' upper surface for fretting due to contact with the adjacent bracket (as shown in Photos 1 and 3).

If defective parts are found, including corrosion other than mild surface oxidation, do not fly the aircraft and contact the BMAA immediately for further advice.

After inspecting the areas concerned, record the inspection as per Section 2 above. Thereafter, carry out the Service Bulletin every 6 months or 50 hours, whichever is sooner.

5. **Changes to Operating Data**

5.1. Changes to Weight and Balance

None

5.2. Changes to Operator's Manual

A copy of this SB is to be retained with the Operators Manual

5.3. Changes to Maintenance Manual

None

5.4. Changes to Placards

None

6. **Contact Details**

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7. **Authorisation**

This Service Bulletin has been authorised by the BMAA Chief Technical Officer.

Authorised by

B J Syson

Chief Technical Officer

British Microlight Aircraft Association

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Initial Distribution:

Mr A Love, CAA Aircraft Projects Dept (Gatwick)

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MAAN File 1918

Savannah post-approval file

All registered owners of MXP 740 Savannah Classic and Savannah VG aircraft

List of Appendices to this Service Bulletin

Ref:	Title:	No. Pages
Appendix A	Photographs of areas to which particular attention should be paid during inspection.	5

Appendix A

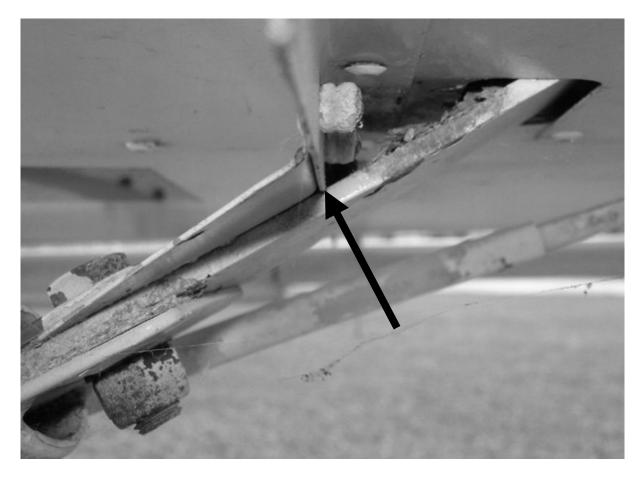


Photo 1: Severe inter-granular corrosion of the attachment plates and fittings. Also potential site of fretting is marked with an arrow.

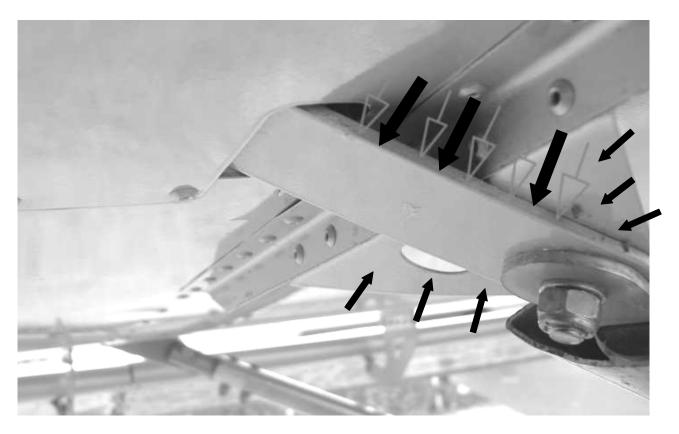


Photo 2: The large arrows point out the side of the main lift strut attachment plate, whilst the smaller arrows point out the fixing plate; all sides of which also need to be thoroughly inspected.

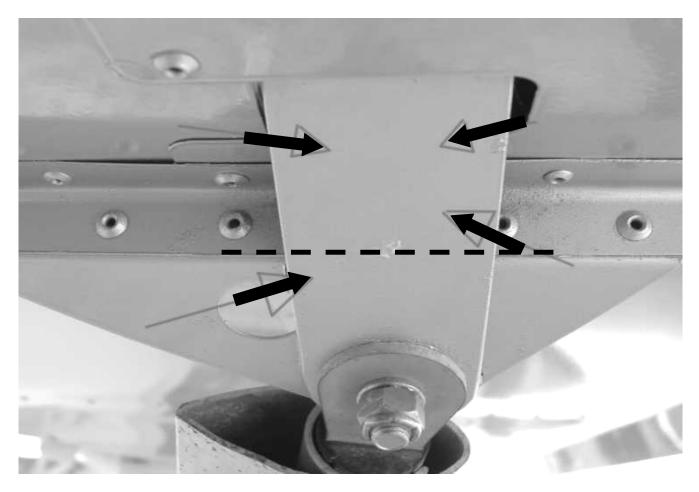


Photo 3: The four arrows here point out the underside of the lift strut attachment plate; the topside should also be inspected. Pay particular attention to the topside of the plate in the area marked by the dashed line and ensure that no fretting has taken place between the plate and the adjacent angle.

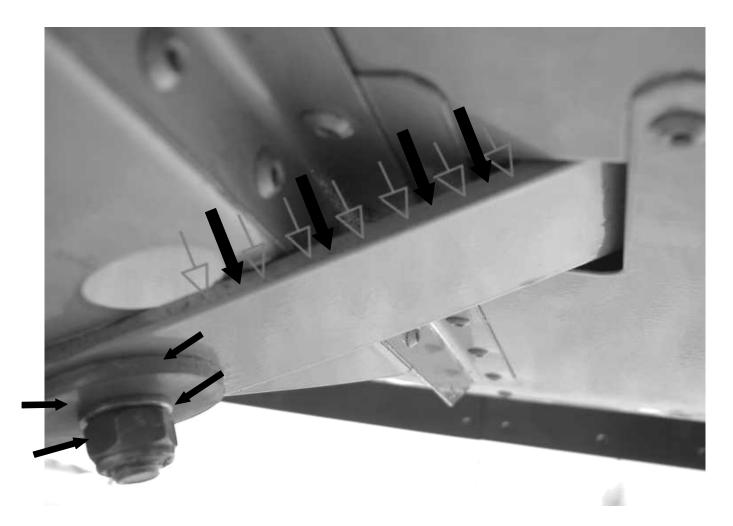


Photo 4: The larger arrows here point out the rear side of the lift strut attachment plate, whilst the smaller arrows point out the fixings with which the lift strut has been attached.

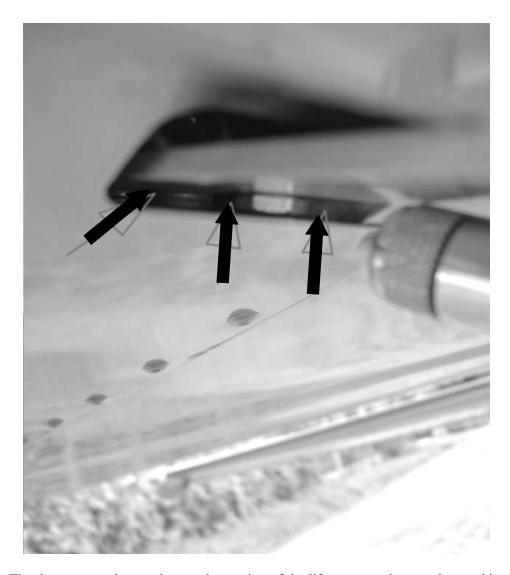


Photo 5: The three arrows here point out the section of the lift strut attachment plate and its fixings that are to be found inside the wing. The torch should be used to aid inspection of these internal parts.