

## MICROLIGHT AIRWORTHINESS APPROVAL NOTE

MAAN NO: 2000

ISSUE 1

DATE: 12 July 2006

TITLE: Microlight Airworthiness Approval Note 2000,  
Skyranger – Service Bulletins 2000/1, 2000/2 and 2000/3.

Applicability: SB2000/1 – UK Skyranger aircraft with CKT exhaust (Rotax 912 and 912S variants)  
SB2000/2 – All UK Skyranger aircraft  
SB2000/3 – UK Skyranger aircraft with Kiev propellers

STAGE: Authorisation

### 1. INTRODUCTION

The Skyranger is an amateur-built microlight aeroplane described in Microlight HADS HM4.

This MAAN authorises the issue of three service bulletins by Flylight Airsports Ltd, which are raised in response to in-service experience of this type. These service bulletins are appended to this MAAN for information and are numbered as follows:

Skyranger Service Bulletin 2000/1: Inspection and modification of CKT exhaust.

Skyranger Service Bulletin 2000/2: Application of fire-resistant paint to engine cowlings.

Skyranger Service Bulletin 2000/3: Check of correct installation of Kiev propeller spacer.

All service bulletins are to be mandatory.

### 2. BASIS FOR APPROVAL

The basis for approval of the Skyranger aircraft referred to in this MAAN is BCAR Section S issue 3.

### 3. DESCRIPTION

3.1 SB2000/1 – Instances of cracking of the tailpipe on CKT exhausts have occurred on Rotax 912S Skyranger variants. This problem has been reported on some examples after less than 100 hours. No such failures have been reported on 80hp Rotax 912

variants to date. The cracking may be due to start-up shake, which is noticeably more fierce with the Rotax 912S than with the 912. The cracking occurs around two welded seams on the tailpipe downstream of the exhaust box. The exhaust manufacturer, CKT, has developed a corrective modification in the form of a 'steady bracket'. Service Bulletin 2000/1 introduces an inspection schedule for all variants with the CKT exhaust, and mandates modification for 912S engine variants within 10 hours of the effective date of the MPD or the next permit renewal, whichever is sooner.

- 3.2 SB2000/2 – An indeterminate number of engine cowlings have been supplied that have been incorrectly manufactured using non-fire-resistant resin. As there is no easy way to determine those cowlings that are affected, this service bulletin 2000/2 mandates painting the inside of all engine cowlings with the fire-resistant paint Envirograf 81 within two months of the effective date of the MPD or the next permit renewal, whichever is sooner.
- 3.3 SB2000/3 – Some Kiev propeller spacers contain large diameter lightening holes in addition to the clearance holes for the propeller bolts. It is possible to incorrectly install the propeller spacer with the propeller bolts through the lightening holes instead of the clearance holes. This puts bending loads through the propeller bolts (rather than pure shear loads), which cause premature failure of the bolts. Service bulletin 2000/3 mandates removal and inspection of the propeller installation before further flight.

#### 4. TECHNICAL INVESTIGATION

- 4.1 SB2000/1 – The modification to the exhaust in the form of a 'steady bracket' provides additional support for the tailpipe and is considered likely to reduce the tendency of the affected welds to crack. If a weld were to crack and fail despite the bracket being in place, the modification has the secondary benefit of keeping the tailpipe attached to the exhaust significantly reducing the risk of further damage to the aeroplane. The modification is not considered to adversely affect the safety of the aeroplane in any way.
- 4.2 SB2000/2 – Envirograf 81 is a fire-resistant coating specifically for fibreglass and other plastics, and provides compliance with BCAR S 1193.
- 4.3 SB2000/3 – This service bulletin concerns potential incorrect assembly; the fundamental design is neither affected nor flawed.

#### 5. FLIGHT TESTING

Not required.

6. MANUALS, PLACARDS AND INFORMATION

- 6.1 SB2000/1 – All inspections in the maintenance schedule in the operator’s manual are to be amended to incorporate the inspection contained within the service bulletin. The service bulletin is to be appended to the operator’s manual. Compliance with this service bulletin is to be recorded in the aircraft’s airframe and engine logbooks.
- 6.2 SB2000/2 – No amendment is required to any existing operating data. Compliance with this service bulletin is to be recorded in the aircraft’s airframe logbook.
- 6.3 SB2000/3 – No amendment is required to any existing operating data. Compliance with this service bulletin is to be recorded in the aircraft’s airframe logbook.

7. NOISE CERTIFICATION

Not affected.

8. RADIO

Any aircraft radio installation is not affected by this note.

9. INSPECTION

To HADS HM4 in its latest version, plus the Service Bulletins attached as appended to this MAAN.

10. WEIGHT AND BALANCE

Additional weight due to embodiment of these Service Bulletins is considered negligible, with negligible effect on cg.

11. SIGNIFICANT FEATURES AND LIMITATIONS

Not affected.

## 12. CERTIFICATION

I authorise issue of Skyranger Service Bulletins 2000/1, 2000/2 and 2000/3, as appended to this MAAN, by Flylight Airsports Ltd.

I request that the CAA issue Mandatory Permit Directives (MPDs) to support Skyranger Service Bulletins 2000/1, 2000/2 and 2000/3.

I authorise amendment of HADS HM4 to reflect the instructions contained within this MAAN.

Prepared by:



B J Syson  
Deputy Chief Technical Officer  
British Microlight Aircraft Association

Authorised by:



J A F Viner  
Chief Technical Officer  
British Microlight Aircraft Association

Initial Distribution:

Mr A Love, CAA Aircraft Projects Dept (Gatwick)  
Mr R Bedwell, CAA Regional Office (Gatwick)  
CAA Applications and Certifications Section (Gatwick)  
Mr P Dewhurst, Flylight Airsports Ltd  
Skyranger Post approval File  
MAAN File 2000

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Inspection and modification of CKT exhaust*

*Reference: SB BMAA MAAN 2000/1 issue 1*

*Applicability: UK Skyranger aircraft with  
CKT exhaust (Rotax 912 and  
912S variants)*

*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

## 1. Introduction

### **Why has this Service Bulletin been issued?**

Instances of cracking of the tailpipe on CKT exhausts have occurred on Rotax 912S Skyranger variants. This problem has been reported on some examples after less than 100 hours. No such failures have been reported on 80hp Rotax 912 variants to date. The cracking may be due to start-up shake, which is noticeably more fierce with the Rotax 912S than with the 912.

### **What aircraft are affected?**

All UK Skyranger aircraft with CKT exhausts (Rotax 912S **and** 912 variants). However note that the requirements of this service bulletin are different for Rotax 912 variants compared to Rotax 912S engined variants.

### **What parts are affected?**

The cracking occurs around two welded seams on the tailpipe downstream of the exhaust box on CKT exhausts – see appendix A for more details. The exhaust manufacturer has developed a corrective modification in the form of a ‘steady bracket’.

### **What documents are affected?**

The aircraft’s maintenance manual.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Inspection and modification of CKT exhaust*

*Reference: SB BMAA MAAN 2000/1 issue 1*

*Applicability: UK Skyranger aircraft with CKT exhaust (Rotax 912 and 912S variants)*

*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

## 2. Qualifications

### **Who may implement this Service Bulletin?**

The owner/operator or their employee may implement this service bulletin.

### **Who may certify that this Service Bulletin has been properly carried out?**

The inspection part of this service bulletin does not require an independent check. However, for Rotax 912S variants, correct installation of the exhaust after it has been modified must be checked before further flight by either a BMAA inspector or another qualified microlight pilot, who must sign the appropriate logbook entries to confirm this.

### **Where must record be made of the Service Bulletin?**

Entries must be made in the aircraft's airframe **and** engine logbooks.

## 3. What is required to implement this Service Bulletin?

### **Inspection**

Appropriate tools to remove/refit the engine cowlings.  
A bright electrical torch.

### **Exhaust removal/refitting**

Appropriate tools to remove/refit the engine cowlings.  
A plain wire hook or a loop of chord (or similar), but not a pair of pliers, to remove/refit the exhaust springs.  
Safety wire and a pair of twisting pliers to secure the exhaust and exhaust springs.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Inspection and modification of CKT exhaust*

*Reference: SB BMAA MAAN 2000/1 issue 1*

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*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

## 4. How to implement this Service Bulletin

### Rotax 912 variants:

1. Before further flight carefully inspect the tailpipe for cracking. If any cracking is evident do not fly the aircraft and contact the BMAA for advice. Note that it may be necessary to remove the lower cowling to perform a thorough inspection.
2. Amend the Daily Inspection ('A' check) in the maintenance schedule in the operator's manual to incorporate the inspection contained within this service bulletin. Also amend the 'B', 'C' and Annual checks to incorporate the inspection **with the lower cowling removed**. Append this service bulletin to the operator's manual.
3. An entry must be made in both the airframe and engine logbooks stating that "***BMAA Service Bulletin 2000/1 (inspection of CKT exhaust) has been carried out***", along with the name, qualification and signature of the person implementing the service bulletin.

### Rotax 912S variants:

1. Before further flight carefully inspect the tailpipe for cracking. If any cracking is evident do not fly the aircraft, remove the exhaust and return it to CKT for remedial action and modification. If there is no cracking an entry must be made in both the airframe and engine logbooks stating that "***The initial inspection part of BMAA Service Bulletin 2000/1 (inspection and modification of CKT exhaust) has been carried out***", along with the name, qualification and signature of the person implementing the service bulletin. Note that it may be necessary to remove the lower cowling to perform a thorough inspection.
2. Amend the Daily Inspection ('A' check) in the maintenance schedule in the operator's manual to incorporate the inspection contained within this service bulletin. Also amend the 'B', 'C' and Annual checks to incorporate the inspection **with the lower cowling removed**. Append this service bulletin to the operator's manual.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Inspection and modification of CKT exhaust*

*Reference: SB BMAA MAAN 2000/1 issue 1*

*Applicability: UK Skyranger aircraft with  
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912S variants)*

*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

3. Within the next 10 hours, or before the next permit renewal if sooner, remove the exhaust and return it to CKT for modification. On its return, re-install the exhaust. An independent inspection of the re-installed exhaust, by an inspector or another pilot, is required before further flight.
4. An entry must be made in both the airframe and engine logbooks stating that *“BMAA Service Bulletin 2000/1 (inspection and modification of CKT exhaust) has been carried out”*, along with the name, qualification and signature of the person implementing the service bulletin.

Note that the exhaust must still continue to be inspected as part of the Daily, ‘B’, ‘C’ and Annual checks after the exhaust has been modified.

## 5. Changes to operating data

### Changes to Weight and Balance

None

### Changes to the Operator’s Manual

A copy of this service bulletin must be retained with the Operator’s Manual.

### Changes to the Maintenance Manual

Amend the Daily Inspection (‘A’ check) in the maintenance schedule in the operator’s manual to incorporate the inspection contained within this service bulletin. Also amend the ‘B’, ‘C’ and Annual checks to incorporate the inspection with the lower cowling removed. For Rotax 912S variants the exhaust must still continue to be inspected as part of the Daily, ‘B’, ‘C’ and Annual checks after the exhaust has been modified.

### Changes to Placards

None.



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CKT exhaust (Rotax 912 and  
912S variants)*

*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

## 6. Authorisation

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

Authorised by



J A F Viner  
Chief Technical Officer  
British Microlight Aircraft Association

Initial Distribution:

- All registered owners of Skyranger aircraft (Rotax 912 and 912S variants)
- Mr P Dewhurst (Flylight Airsports Ltd)
- MAAN file 2000
- CAA: (1) Mr A Love (Aircraft projects, Gatwick)  
(2) Mr R Bedwell (Regional office, Gatwick)

## 7. List of Appendices to this Service Bulletin

Ref:	Title:	No. Pages
Appendix A	How to inspect the exhaust tailpipe	1
Appendix B	How to remove and refit the exhaust	1
Appendix C	Contact details	1

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Inspection and modification of CKT exhaust*

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*Applicability: UK Skyranger aircraft with CKT exhaust (Rotax 912 and 912S variants)*

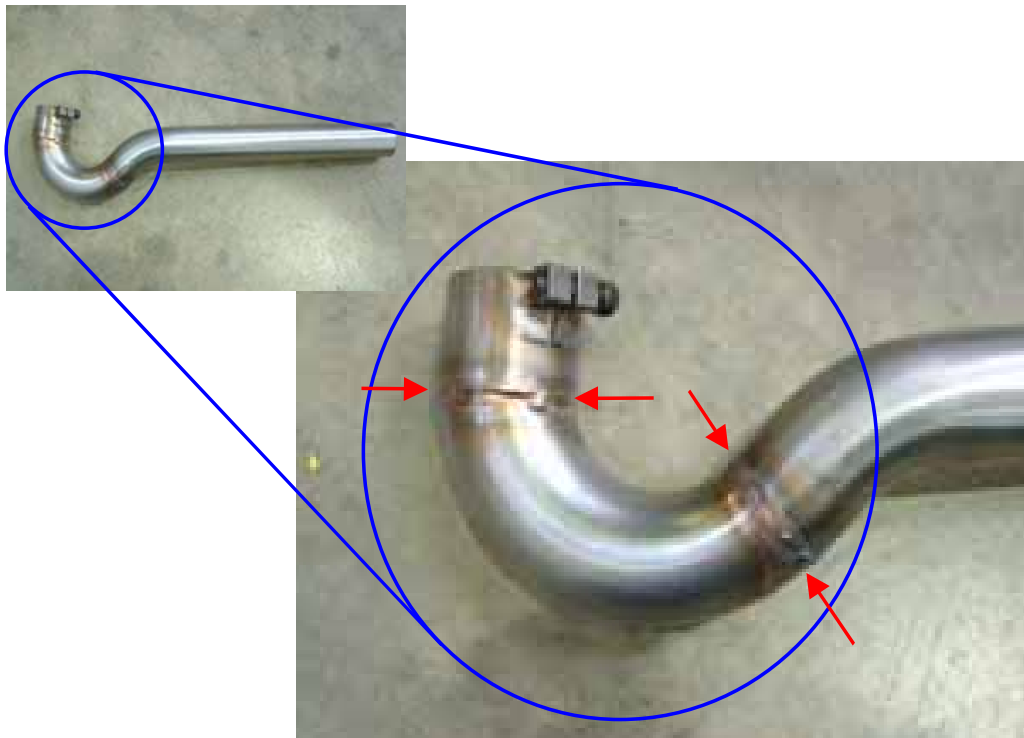
*Issue date: 12 July 2006*

**Mandatory inspection and modification.**

**This SB must be incorporated BEFORE FURTHER FLIGHT.**

## Appendix A – How to inspect the exhaust tailpipe

The welds on the exhaust tailpipe highlighted in figure 1 must be carefully inspected for cracks. A bright torch should be used to illuminate the welds. Cracks of any length require remedial action to be taken.



**Figure 1: CKT exhaust tailpipe highlighting the two welded seams prone to cracking**

This area can typically be satisfactorily inspected with removal of the top engine cowling only, because the underside of the welds can either be viewed from below the aircraft through the gap at the rear of the lower cowling, or from above using a mirror. However some installations may benefit from removal of the lower cowling in order to perform a thorough inspection of the problem area.

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<i>Issue date: 12 July 2006</i>	
<b>Mandatory inspection and modification.</b>	
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## Appendix B – How to remove and refit the exhaust

Remove the top engine cowling. Un-bolt the coolant radiator from the lower cowling (leaving the radiator connected to the engine) and remove the lower cowling. Detach the exhaust springs and remove the exhaust box from the four exhaust down pipes. Do not use pliers to remove the exhaust springs as these can mark the spring and initiate fatigue cracks; use a wire hook or a loop of chord instead. Remove the tailpipe to aid shipment. Both the exhaust box and tailpipe need to be returned to CKT.

Re-fitting is the reverse of removal. Lubricate the ball joints with a high-temperature lubricant such as Copaslip. It is recommended that the exhaust box is loosely safety wired to the four exhaust down pipes as a back-up in case of spring failure. Pass the safety wire through the centre of the spring to help retain the spring itself. A backup such as safety wire is mandatory if non-stainless-steel springs are used. An independent inspection of the re-installed exhaust, by an inspector or another pilot, is required before further flight.

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<i>Issue date: 12 July 2006</i>	
<b>Mandatory inspection and modification.</b>	
<b>This SB must be incorporated BEFORE FURTHER FLIGHT.</b>	

## Appendix C – Contact Details

BMAA  
Bullring, Deddington  
Banbury  
OX15 0TT  
01869 336 006  
[cto@bmaa.org](mailto:cto@bmaa.org)

CKT Aero and Automotive Engineering  
4ab Hartnoll Business Centre, Post Hill  
Tiverton  
EX16 4NG  
01884 242 211  
[info@cktengineering.com](mailto:info@cktengineering.com)

Flylight Airsports Ltd  
Sywell Aerodrome  
Northampton  
NN6 0BT  
01604 494 459  
[engineering@flylight.co.uk](mailto:engineering@flylight.co.uk)

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Application of fire-resistant paint to engine cowlings*

*Reference: SB BMAA MAAN 2000/2 issue 1*

*Applicability: All UK Skyranger aircraft*

*Issue date: 12 July 2006*

**Mandatory modification.**

**This SB must be incorporated within the next two months or before the next permit renewal if sooner**

## 1. Introduction

### **Why has this Service Bulletin been issued?**

An indeterminate number of engine cowlings have been supplied that have incorrectly been manufactured using non-fire-resistant resin. As there is no easy way to determine those cowlings that are affected, this service bulletin mandates painting the inside of all engine cowlings with fire-resistant paint.

### **What aircraft are affected?**

All UK Skyranger aircraft.

### **What parts are affected?**

The engine cowlings.

### **What documents are affected?**

None.

## 2. Qualifications

### **Who may implement this Service Bulletin?**

The owner/operator or their employee may implement this service bulletin.

### **Who may certify that this Service Bulletin has been properly carried out?**

This service bulletin does not require an independent check.

### **Where must record be made of the Service Bulletin?**

An entry must be made in the aircraft's airframe logbook.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Application of fire-resistant paint to engine cowlings*

*Reference: SB BMAA MAAN 2000/2 issue 1*

*Applicability: All UK Skyranger aircraft*

*Issue date: 12 July 2006*

**Mandatory modification.**

**This SB must be incorporated within the next two months or before the next permit renewal if sooner**

### 3. What is required to implement this Service Bulletin?

Appropriate tools to remove/refit the engine cowlings.  
400ml Envirograf product 81 (Flylight Airports Ltd has agreed to provide this to owners free-of-charge for collection).  
A paintbrush.

### 4. How to implement this Service Bulletin

1. Within the next two months, or before the next permit renewal if sooner, paint the inside of the engine cowlings with Envirograf product 81 fire-resistant paint.
2. An entry must be made in the airframe logbook stating that “*BMAA Service Bulletin 2000/2 (application of fire-resistant paint to engine cowlings) has been carried out*”, along with the name, qualification and signature of the person implementing the service bulletin.

### 5. Changes to operating data

#### **Changes to Weight and Balance**

None

#### **Changes to the Operator’s Manual**

A copy of this service bulletin must be retained with the Operator’s Manual.

#### **Changes to the Maintenance Manual**

None.

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*Title: UK Skyranger: Application of fire-resistant paint to engine cowlings*

*Reference: SB BMAA MAAN 2000/2 issue 1*

*Applicability: All UK Skyranger aircraft*

*Issue date: 12 July 2006*

**Mandatory modification.**

**This SB must be incorporated within the next two months or before the next permit renewal if sooner**

## Changes to Placards

None.

## 6. Authorisation

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

Authorised by



J A F Viner  
Chief Technical Officer  
British Microlight Aircraft Association

Initial Distribution:

- All registered owners of Skyranger aircraft (Rotax 912 and 912S variants)
- Mr P Dewhurst (Flylight Airsports Ltd)
- MAAN file 2000
- CAA: (1) Mr A Love (Aircraft projects, Gatwick)  
(2) Mr R Bedwell (Regional office, Gatwick)

## 7. List of Appendices to this Service Bulletin

Ref:	Title:	No. Pages
Appendix A	Application Instructions	1
Appendix B	Contact details	1

# BMAA – AIRCRAFT SERVICE BULLETIN

<i>Title: UK Skyranger: Application of fire-resistant paint to engine cowlings</i>	
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<b>Mandatory modification.</b>	
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## Appendix A – Application Instructions

Remove the top engine cowling. Un-bolt the coolant radiator from the lower cowling (leaving the radiator connected to the engine) and remove the lower cowling.

Apply fire-resistant paint to:

- The entire inside of the top engine cowling;
- The entire inside of the lower engine cowling;
- All remaining exposed fibreglass inside the engine compartment (adjacent to the firewall).

Clean and, importantly, degrease all surfaces prior to applying the paint. Carefully follow the instructions provided with the paint. It is recommended that the paint is applied with a brush. Refit the cowlings once the paint is dry.



# BMAA – AIRCRAFT SERVICE BULLETIN

<i>Title: UK Skyranger: Application of fire-resistant paint to engine cowlings</i>	
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<i>Issue date: 12 July 2006</i>	
<b>Mandatory modification.</b>	
<b>This SB must be incorporated within the next two months or before the next permit renewal if sooner</b>	

## Appendix B – Contact Details

BMAA  
Bullring, Deddington  
Banbury  
OX15 0TT  
01869 336 006  
[cto@bmaa.org](mailto:cto@bmaa.org)

Flylight Airsports Ltd  
Sywell Aerodrome  
Northampton  
NN6 0BT  
01604 494 459  
[engineering@flylight.co.uk](mailto:engineering@flylight.co.uk)

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Check of correct installation of Kiev propeller spacer*

*Reference: SB BMAA MAAN 2000/3 issue 1*

*Applicability: UK Skyranger aircraft with Kiev propellers*

*Issue date: 12 July 2006*

**Mandatory inspection.**

**This SB must be incorporated BEFORE FURTHER FLIGHT**

## 1. Introduction

### **Why has this Service Bulletin been issued?**

Some Kiev propeller spacers contain large diameter lightening holes in addition to the clearance holes for the propeller bolts – see appendix A for more details. It is possible to incorrectly install the propeller spacer with the propeller bolts through the lightening holes instead of the clearance holes. This puts bending loads through the propeller bolts (rather than pure shear loads), which cause premature failure of the bolts.

### **What aircraft are affected?**

All UK Skyranger aircraft with Kiev propellers fitted.

### **What parts are affected?**

The propeller spacer.

### **What documents are affected?**

None.

## 2. Qualifications

### **Who may implement this Service Bulletin?**

The owner/operator or their employee may implement this service bulletin.

### **Who may certify that this Service Bulletin has been properly carried out?**

After performing the inspection, correct fitment of the propeller must be checked before further flight by either a BMAA inspector or another qualified microlight pilot, who must sign the logbook entry to confirm this.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Check of correct installation of Kiev propeller spacer*

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*Issue date: 12 July 2006*

**Mandatory inspection.**

**This SB must be incorporated BEFORE FURTHER FLIGHT**

## **Where must record be made of the Service Bulletin?**

An entry must be made in the aircraft's airframe logbook.

## **3. What is required to implement this Service Bulletin?**

Appropriate tools to remove/refit the propeller.

New propeller bolts are required if the spacer was incorrectly installed, otherwise the old bolts can be reused.

Safety wire and a pair of twisting pliers to secure the propeller bolts.

## **4. How to implement this Service Bulletin**

1. Before further flight remove the propeller and check that the propeller bolts have been correctly installed through the clearance holes in the propeller spacer, not through any larger diameter lightening holes.
2. If the propeller was incorrectly installed check for any damage to the propeller flange (on the prop' shaft emanating from the engine/gearbox), spacer and propeller hub. If any damage is found contact the BMAA for advice.
3. Re-install the propeller using the instructions supplied with the propeller: these should be at annex G to the operator's manual, or a copy can be obtained from Flylight Airsports Ltd. In particular ensure that the correct torques are used and that the propeller bolts are safety wired in place to avoid them loosening in service. If the propeller was incorrectly installed new propeller bolts **must** be used and the old bolts disposed of. New bolts are available from Flylight Airsports Ltd.
4. An independent inspection of the re-installed propeller, by an inspector or another qualified microlight pilot, is required before further flight.

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Check of correct installation of Kiev propeller spacer*

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**Mandatory inspection.**

**This SB must be incorporated BEFORE FURTHER FLIGHT**

5. An entry must be made in both the aircraft's airframe and engine logbooks stating that "*BMAA Service Bulletin 2000/3 (check of correct installation of Kiev propeller spacer) has been carried out*", along with the name, qualification and signature of the person implementing the service bulletin.

## **5. Changes to operating data**

### **Changes to Weight and Balance**

None

### **Changes to the Operator's Manual**

A copy of this service bulletin must be retained with the Operator's Manual.

### **Changes to the Maintenance Manual**

None.

### **Changes to Placards**

None.

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*Title: UK Skyranger: Check of correct installation of Kiev propeller spacer*

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## 6. Authorisation

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

Authorised by



J A F Viner  
Chief Technical Officer  
British Microlight Aircraft Association

Initial Distribution:

- All registered owners of Skyranger aircraft (Rotax 912 and 912S variants)
- Mr P Dewhurst (Flylight Airsports Ltd)
- MAAN file 2000
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## 7. List of Appendices to this Service Bulletin

Ref:	Title:	No. Pages
Appendix A	Details of Affected Kiev Propeller Spacers	1
Appendix B	Contact details	1

# BMAA – AIRCRAFT SERVICE BULLETIN

*Title: UK Skyranger: Check of correct installation of Kiev propeller spacer*

*Reference: SB BMAA MAAN 2000/3 issue 1*

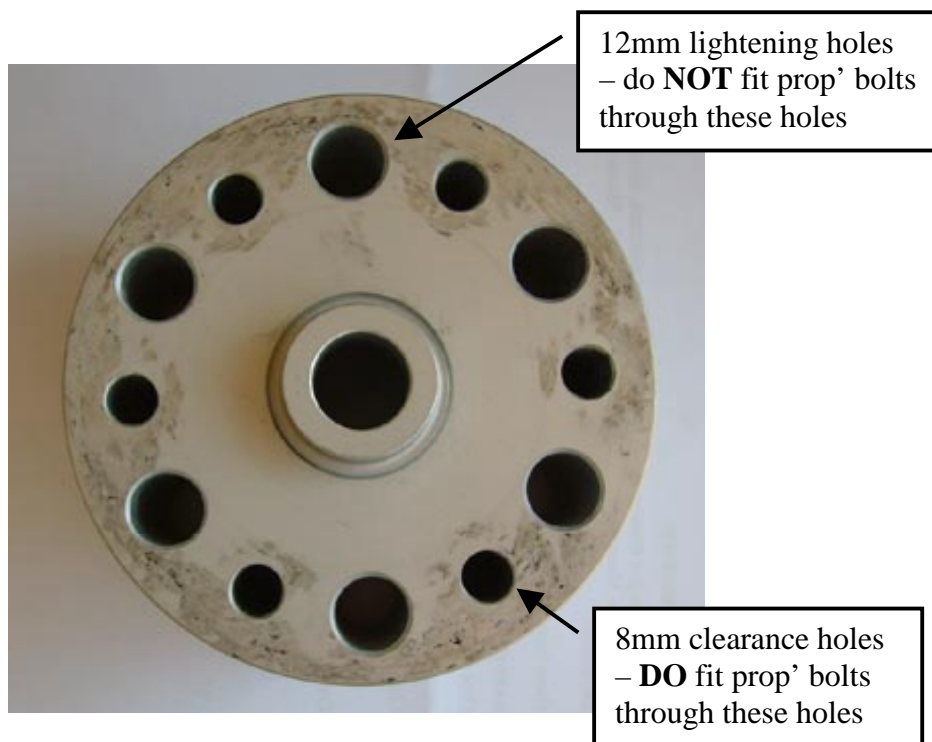
*Applicability: UK Skyranger aircraft with Kiev propellers*

*Issue date: 12 July 2006*

**Mandatory inspection.**

**This SB must be incorporated BEFORE FURTHER FLIGHT**

## Appendix A – Details of Affected Kiev Propeller Spacers



**Figure 1: Affected Kiev propeller spacer highlighting the 8mm clearance holes and the 12mm lightening holes**

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<i>Issue date: 12 July 2006</i>	
<b>Mandatory inspection.</b>	
<b>This SB must be incorporated BEFORE FURTHER FLIGHT</b>	

## Appendix B – Contact Details

BMAA  
Bullring, Deddington  
Banbury  
OX15 0TT  
01869 336 006  
[cto@bmaa.org](mailto:cto@bmaa.org)

Flylight Airsports Ltd  
Sywell Aerodrome  
Northampton  
NN6 0BT  
01604 494 459  
[engineering@flylight.co.uk](mailto:engineering@flylight.co.uk)

## **Skyranger SB 2000/1 – MPD suggested text**

### **Subject**

Inspection and modification of CKT exhaust

### **Applicability**

UK Skyranger aircraft with CKT exhaust (Rotax 912 and 912S variants)

### **Reason**

Instances of cracking of the tailpipe on CKT exhausts have occurred on Rotax 912S Skyranger variants. This problem has been reported on some examples after less than 100 hours. No such failures have been reported on 80hp Rotax 912 variants to date. The cracking may be due to start-up shake, which is noticeably more fierce with the Rotax 912S than with the 912.

The cracking occurs around two welded seams on the tailpipe downstream of the exhaust box. The exhaust manufacturer, CKT, has developed a corrective modification in the form of a 'steady bracket'.

### **Compliance**

Before further flight carry out the instructions contained within Skyranger Service Bulletin 2000/1, which is appended to British Microlight Aircraft Association (BMAA) Microlight Airworthiness Approval Note (MAAN) 2000. The exhausts of 912S variants must be modified in accordance with Skyranger Service Bulletin 2000/1 within 10 hours of the effective date of this MPD, or before the next permit renewal if sooner.

A copy of Skyranger Service Bulletin 2000/1 and further information can be obtained from:

British Microlight Aircraft Association  
Bullring, Deddington  
Banbury  
OX15 0TT

Tel: 01869 336 006  
Fax: 01869 337 116  
Email: cto@bmaa.org

Record compliance with this MPD in aircraft's airframe and engine logbooks.

This MPD becomes effective on \*\*\*.



## **Skyranger SB 2000/2 – MPD suggested text**

### **Subject**

Application of fire-resistant paint to engine cowlings.

### **Applicability**

All UK Skyranger aircraft

### **Reason**

An indeterminate number of engine cowlings have been supplied that have incorrectly been manufactured using non-fire-resistant resin. As there is no easy way to determine those cowlings that are affected, this service bulletin mandates painting the inside of all engine cowlings with fire-resistant paint.

### **Compliance**

Within two months of the effective date of this MPD, or before the next permit renewal if sooner, paint the inside of the engine cowlings with fire-resistant paint in accordance with Skyranger Service Bulletin 2000/2, which is appended to British Microlight Aircraft Association (BMAA) Microlight Airworthiness Approval Note (MAAN) 2000.

A copy of Skyranger Service Bulletin 2000/2 and further information can be obtained from:

British Microlight Aircraft Association  
Bullring, Deddington  
Banbury  
OX15 0TT

Tel: 01869 336 006  
Fax: 01869 337 116  
Email: [cto@bmaa.org](mailto:cto@bmaa.org)

Record compliance with this MPD in the aircraft's airframe logbook.

This MPD becomes effective on \*\*\*

## **Skyranger SB 2000/3 – MPD suggested text**

### **Subject**

Check of correct installation of Kiev propeller spacer.

### **Applicability**

UK Skyranger aircraft with Kiev propellers

### **Reason**

Some Kiev propeller spacers contain large diameter lightening holes in addition to the clearance holes for the propeller bolts. It is possible to incorrectly install the propeller spacer with the propeller bolts through the lightening holes instead of the clearance holes. This puts bending loads through the propeller bolts (rather than pure shear loads), which cause premature failure of the bolts.

### **Compliance**

Before further flight inspect the propeller installation in accordance with Skyranger Service Bulletin 2000/3, which is appended to British Microlight Aircraft Association (BMAA) Microlight Airworthiness Approval Note (MAAN) 2000.

A copy of Skyranger Service Bulletin 2000/3 and further information can be obtained from:

British Microlight Aircraft Association  
Bullring, Deddington  
Banbury  
OX15 0TT

Tel: 01869 336 006

Fax: 01869 337 116

Email: [cto@bmaa.org](mailto:cto@bmaa.org)

Record compliance with this MPD in the aircraft's airframe and engine logbooks.

This MPD becomes effective on \*\*\*