

# Airworthiness Directive Schedule

## Microlight

### Microlight Aircraft

28 July 2011

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The date above indicates the amendment date of this schedule.

New or amended ADs are shown with an asterisk \*

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**DCA/MICRO/1 Wing Leading Edge Fabric – Inspection and Modification**

**Applicability:** Micro Aviation (NZ) Ltd model B20, B22 and B22S Bantam microlight aircraft with wings covered in dacron fabric.

**Requirement:** To prevent failure of the fabric covering the wings, accomplish the following:-

1. Inspect the wing fabric from the leading edge back 400mm over the top surface for signs of chaffing against the wing ribs. Pay particular attention to the fabric in the area of the three inboard wing ribs on each wing. Press the fabric immediately each side of the each wing rib to ensure the fabric is capable of taking flight loads without ripping. It is the three inboard wing ribs on each wing that are most affected by chaffing because of their position within the propeller slipstream. Before further flight, repair or renew as necessary any fabric that shows signs of chaffing. Micro Aviation (NZ) Ltd SB B22S/99/01 refers.

2. Remove the fabric covering from the wings and inspect the inside of the fabric for evidence of chaffing. Repair or renew any fabric found chaffed. Install PVC Cap Strips P/N B22S–229-1 on the upper surface of each wing rib per SB B22S/99/01.

**Compliance:**

1. Inspect before further flight.
2. Inspection of inside of fabric and installation of PVC cap strips to be accomplished by 30 June 1999, unless PVC cap strips are already fitted.

**Effective Date:** 25 March 1999

**DCA/MICRO/2 Aluminium Tailplane Strut U-Brackets - Replacement**

**Applicability:** Quad City Challenger II fitted with aluminium tailplane strut U-brackets.

**Requirement:** To prevent failure of the tailplane strut U-brackets, replace aluminium brackets with stainless steel brackets.

**Compliance:** By 7 June 1999

**Effective Date:** 7 May 1999

**DCA/MICRO/3 Flaperon Control System - Inspection and Modification**

**Applicability:** Micro Aviation (NZ) Ltd Bantam microlight aircraft model B22 S/N 145 and 146, and model B22S up to S/N 99-018.

**Requirement:** To prevent failure of the flaperon cable, accomplish the following:-

1. Inspect flaperon cable per Micro Aviation (NZ) Ltd SB B22S/99/02, part (a). Replace any cable with a black outer covering before further flight.

2. For the Bantam B22S model only, replace the lower mounting bracket per SB B22S/99/02, part (b).

**Compliance:**

1. Before further flight.
2. By 15 October 1999

**Effective Date:** 15 July 1999

**DCA/MICRO/4 Horizontal Stabiliser Attach Fittings – Inspection and Replacement**

**Applicability:** All Dyn'Aero MCR type aircraft, all S/N.

**Requirement:** To prevent failure of the horizontal stabiliser attach fittings possibly resulting in the loss of the stabiliser and aircraft control, accomplish the following:

1. For all aircraft:

Inspect the stabiliser attach fittings for condition and type per the instructions in Dyn'Aero Service Bulletin (SB) No. 08 B 0034. If any defects are found replace the attach fittings per the instructions in SB No. 08 B 0034 before further flight.

2. For aircraft fitted with 4mm attach fittings "type 3":

Replace attach fittings with stainless steel fittings per SB No. 08 B 0034.

**Note:** The requirements of this AD are an interim solution pending further investigation and manufacturer instruction.

(DGAC AD F-2008-002 refers)

**Compliance:** 1. Before further flight, unless the initial inspection already accomplished, and thereafter at intervals not to exceed 100 hours TIS.

2. Before further flight.

**Effective Date:** 24 April 2008

**DCA/MICRO/5 Aircraft Fuel System – Calibration**

**Applicability:** All microlight aircraft.

**Requirement:** To ensure actual and useable fuel quantity are known and accurately displayed to the pilot, calibrate the aircraft fuel system by accomplishing the following after aircraft construction:

1. Maximum fuel capacity:

Fill the aircraft fuel tanks and determine the actual fuel capacity.

2. Unusable fuel quantity:

With the aircraft in the most critical flying attitude determine the unusable fuel quantity by test.

3. Intermediate fuel gauge markings:

Fill the fuel tanks progressively from the unusable fuel quantity level and calibrate the intermediate fuel gauge markings, as applicable.

**Note 1:** Refer to the applicable aircraft pilot operating handbook (POH), the service manual or build instructions, as required, to accomplish these requirements.

**Note 2:** The usable fuel quantity will be less than the maximum fuel tank capacity due to there being residual fuel in the fuel system components such as, the gasolators, fuel filters and fuel lines. The location of the fuel pick-ups in the fuel tanks also has an influence on the usable fuel capacity. Once the useable fuel capacity is known the aircraft endurance can be calculated.

**Note 3:** Avoid low fuel states until the fuel system has been calibrated.

(NZ occurrence refers)

**Compliance:** 1. 2. & 3. Before first flight after construction, or by 29 May 2009 for those aircraft which have not been calibrated before first flight, unless already accomplished.

**Effective Date:** 29 May 2008

**DCA/MICRO/6 NLG Leg – Modification**

**Applicability:** All Dyn'Aero MCR type aircraft, all S/N fitted with a NLG oleo strut with a 28 mm diameter piston shaft. (The oleo cylinder has an external diameter of 32 mm).

**Requirement:** To prevent NLG leg failure, reinforce the nose wheel fork holding bracket per the instructions in Dyn'Aero Service Bulletin No. BS 08 D 0035 dated 10 April 2008, or later approved revisions.

(DGAC AD F-2008-003 refers)

**Compliance:** At the next maintenance inspection, or by 30 September 2008, whichever occurs sooner, unless already accomplished.

**Effective Date:** 31 July 2008

**DCA/MICRO/7 Wing Structure and Control System – Modification**

**Applicability:** Model Zodiac and Zenith CH 601-XL aircraft, all S/N

**Note 1:** This AD is prompted after six overseas in-flight structural breakups of Zodiac CH 601-XL aircraft since 2005. The CAA recommends operators of affected microlight aircraft exercise all possible caution in the operation of their aircraft and observe the safety recommendations in Continuing Airworthiness Notice No. 27-003 issued 20 April 2009 until the requirements of this AD have been accomplished.

**Requirement:** To prevent inflight structural failure due to design and operational aspects of the aircraft, accomplish one of the following two modifications:

1. Embody the structural design changes specified in Aircraft Manufacturing and Design (AMD) Safety Alert/Safety Directive, release date 7 November 2009, revision 1 or

2. Embody UK Light Aircraft Association (LAA) modification MOD/162B/004 issue 1 dated 18 August 2009.

**Note 2:** The requirements of this AD must be supervised or accomplished and certified in the maintenance records by a microlight inspection authorisation holder or a person who holds a current aircraft maintenance engineer licence with appropriate aircraft group rating issued in accordance with Part 66. The requirements of this AD may also be accomplished by the original builder if the aircraft was built from a kit identified in CAA Rule 103.219(1), (2) or (3) and certified in the maintenance records by microlight inspection authorisation holder or a person who holds a current aircraft maintenance engineer licence with appropriate aircraft group rating issued in accordance with Part 66.

**Note 3:** AMD Safety Alert/Safety Directive, release date 7 November 2009 and the recommendations contained in FAA Special Airworthiness Information Bulletin (SAIB) No. CE-10-08 Wing Structural Modification are available on <http://www.zenithair.com/news/ntsb-astm-4-09a.html> The AMD modification provides instructions to install aileron counter balance weights, the reinforcement of the aileron bellcrank area, and modifications to increase the safety margins of the seat area, main spar bolt area and rear spar area.

**Note 4:** LAA modification MOD/162B/004 issue 1 dated 18 August 2009 is available on <http://www.lightaircraftassociation.co.uk/engineering/engineering.html> The modifications described in MOD/162B/004 provides instructions to modify the wing attachments, adds aileron mass balances, alters the elevator trim system, and includes changes to the weight and cg range.

(Several overseas inflight structural failure accidents refer)

**Compliance:**

1. By 26 December 2009.
2. By 26 December 2009.

**Effective Date:** 26 November 2009

#### **DCA/MICRO/8 Airframe Wiring Loom – Inspection and Rework**

**Applicability:** Model P92 Eaglet aircraft, and  
Model P92 Echo Classic De Luxe aircraft, and  
Any Tecnam aircraft fitted with steel braided brake lines.

**Note:** This AD is not applicable to Tecnam aircraft fitted with nylon brake lines. This AD is prompted by a report from an operator of a P92 Eaglet U/L aircraft of a battery contactor randomly switching on and off without activation of the master switch. Investigation revealed an intermittent short of the 20g wire which grounds the battery contactor via the master switch. The main instrument panel loom which runs to the rear of the aircraft was found chafed and intermittently shorting against the braided brake lines in the fuselage structural box section.

**Requirement:** To prevent failure of the aircraft electrical system due to possible wiring loom short circuits, accomplish the following:

Disconnect the battery and remove the front seats . Remove the centre console plastic cover to expose the loom from the instrument panel to the box section.

Lay planks in the rear of the aircraft fuselage to get to the loom. Remove the cable ties securing the main loom to the fuselage wall. Disconnect the output terminal from the battery relay and free up the loom as much as possible.

Pull the loom back through the box section as far as possible and inspect the loom for any signs of chaffing. Repair any damage before further action.

Spray the loom with silicon spray and install heavy duty spiral wrap around the main loom where it passes through the airframe structural box section.

Refit and secure the loom with cable ties, and re-assemble the aircraft per the manufacturer's instructions.

(NZ Occurrence 10/1761 refers)

**Compliance:** Within the next 50 hours TIS or by 27 June 2010 whichever occurs sooner.

**Effective Date:** 27 May 2010

#### **DCA/MICRO/9B Strut Ends – Inspection and Replacement**

**Applicability:** Model Thruster T600, T300 and TST series microlight aircraft fitted with aluminium alloy flying strut ends.

**Note 1:** This AD revised to extend the repetitive inspections to every annual condition inspection. DCA/MICRO/9A revised to extend the repetitive inspections to intervals of 100 hours TIS or 6 months whichever occurs sooner.

- Requirement:** To prevent structural failure due to possible exfoliation corrosion splits in the flying strut ends which can result in the loss of a wing, accomplish the following:  
Accomplish the inspection instructions in Thruster Air Services Bulletin TAS/SB 013 issue 2 or later approved revisions.  
If any cracks or exfoliation corrosion splits are found, replace affected parts with serviceable parts before further flight.
- Note 2:** The visual inspection may be accomplished and recorded in the aircraft maintenance records by the aircraft owner or operator.
- Note 3:** The replacement of aluminium strut ends with steel end fittings terminates the repetitive inspection requirements of this AD.  
(UK CAA MPD 2010-006R1 refers)
- Compliance:** Within the next 100 hours TIS since the last inspection per DCA/MICRO/9B, and thereafter at intervals not to exceed 100 hours TIS and at every annual condition inspection.
- Effective Date:** DCA/MICRO/9 - 29 July 2010  
DCA/MICRO/9A - 25 November 2010  
DCA/MICRO/9B - 31 March 2011

#### **DCA/MICRO/10 Manual Pitch Trim – Inspection, Rework and Modification**

- Applicability:** Savannah aircraft fitted with a manual bungee pitch trim.
- Note 1:** Manual bungee pitch trim is introduced with the embodiment of mandatory modification 12. This AD does not affect aircraft fitted with electric trim embodied by modification 4.
- Requirement:** To prevent pitch trim failure due to the anti-balance tab mechanism becoming strained with the elevator in the full up position which can result in the anti-balance tabs becoming free to flap in the slipstream, accomplish the following:
1. Inspect the anti-balance tab operating mechanism per the instructions in British Microlight Aircraft Association (BMAA) Service Bulletin No. 2283 issue 1 effective date 13 September 2010.
  2. Replace the plastic rod-ends in the anti-balance tab operating mechanism with metal rod-ends per the instructions in BMAA SB No. 2283.
  3. Modify the anti-balance tab operating mechanism with an approved modification per the instructions in BMAA SB No. 2283.
- Note 2:** The installation of an electric trim per MBAA modification 4 is an accepted means of compliance with requirement 3 of this AD. This modification eliminates the anti-balance tab operating mechanism problem.
- Note 3:** A copy of BMAA Service Bulletin No. 2283 issue 1 can be obtained from the British Microlight Aircraft Association (BMAA) at <http://www.bmaa.org/> The use of later approved revisions of this SB is acceptable for compliance with the requirements of this AD.  
(UK CAA MPD 2010-007 refers)
- Compliance:**
1. At every preflight inspection.
  2. By 30 December 2010.
  3. By 31 December 2011.
- Effective Date:** 30 September 2010

**\* DCA/MICRO/11A Cancelled – DCA/MICRO/15 refers****Effective Date:** 28 July 2011**DCA/MICRO/12 RH Control Stick – Inspection and Modification****Applicability:** All Vans RV series aircraft fitted with dual control sticks.**Note:** This AD is prompted after an incident in which a dual control RV aircraft flown from the RH seat was involved in a hard landing after the control stick separated from its receptacle.**Requirement:** To insure the RH (passenger) control stick is properly secured to the control column accomplish the following:

Gains access to the lower end of the RH control stick and determine if the stick is secured in the socket per the instructions in Van's Aircraft Inc. SB No. 07-2-6 dated 6 Feb 2007 or later approved revisions.

If the stick is not secured accomplish the corrective modification per the instructions in SB No. 07-2-6.

(NZ Occurrence 10/4919 refers)

**Compliance:** Within the next 50 hours TIS or by 23 January 2011 whichever occurs sooner, unless previously accomplished.**Effective Date:** 23 December 2010**DCA/MICRO/13 Wing Lift Strut Attachment Plates – Inspection and Repair****Applicability:** ICP Savannah, MXP-740 Savannah Classic and Savannah VG aircraft, all S/N.**Requirement:** To prevent wing strut failure accomplish a detailed visual inspection of the wing lift strut attachment plates and bolts that connect the wing main spar to the front strut for any evidence of cracks, fissures, fretting, deformations, corrosion or oxidation per the instructions in BMAA Service Bulletin 1918 issue 3.

If any defects are found including corrosion (other than mild surface oxidation), accomplish a BMAA approved repair, or a manufacturer approved repair before further flight.

**Note:** A copy of BMAA SB no. 1918 issue 3 can be obtained from the British Microlight Aircraft Association (BMAA) at <http://www.bmaa.org/contact.php>

(UK MPD 2010-009 refers)

**Compliance:** By 30 April 2011 unless previously accomplished, and thereafter at every annual condition inspection.**Effective Date:** 31 March 2011

**DCA/MICRO/14 Aluminium Fittings – Inspection and Replacement**

**Applicability:** Model Dyn Aero MCR-01, MCR-01 Club and MCR-01 ULC aircraft, all S/N.

**Requirement:** To prevent potential structural failure due to possible corrosion, accomplish the following:

Inspect the forward and aft wing attach fittings for general integrity, security and corrosion per the instructions in Light Aircraft Association (LAA) Airworthiness Information leaflet MOD/301/022 issue 1 dated 18 April 2011. It may be necessary to remove both wings to accomplish a thorough visual inspection of the forward and aft wing attach fittings.

Inspect all the aluminium metal fittings on the airframe for general integrity, security and corrosion per the instructions in MOD/301/022.

If any defects are found replace defective parts, or accomplish a LAA approved repair, or a manufacturer approved repair before further flight.

**Note 1:** A copy of LAA Airworthiness Information leaflet MOD/301/022 issue 1 dated 18 April 2011 can be obtained by emailing LAA Engineering at [engineering@laa.uk.com](mailto:engineering@laa.uk.com)

**Note 2:** If any defects are found at the initial inspection report the findings to the Light Aircraft Association (LAA). It is anticipated that the repetitive requirements of this AD may be revised depending on the defects found at the initial inspection.

(UK Emergency MPD 2011-002-E refers)

**Compliance:** Within the next 25 hours TIS or by 13 June 2011 whichever occurs sooner, and thereafter whenever the wings are removed, and at every annual condition inspection for aircraft stored outside, and for hangared aircraft at intervals not to exceed 3 years.

**Effective Date:** 13 May 2011

**\* DCA/MICRO/15 Rotor Blades – Life Limit**

**Applicability:** Model Rotorsport MT-03, MTOSport and Calidus gyroplanes fitted with rotor blades P/N:

|                                 |                        |
|---------------------------------|------------------------|
| Aircraft 8.4m blade (MT Series) | – P/N RSD7033.         |
| Autogyro 8.4m blade (MT series) | – P/N RSD7040.         |
| Autogyro 8m blade (MT Series)   | – P/N RSD7139.         |
| Autogyro 8.4m (Calidus) blade   | – P/N C.RK20 (BG1448). |

**Note:** This AD supersedes DCA/MICRO/11A to introduce a blade life limit of 700 hours for affected rotor blades. The blade life limit was determined by the manufacturer through further investigation and fatigue assessment of the blade design. The blade inspections in Rotorsport UK Ltd. SB No. 034 issue 3 has been introduced into the aircraft maintenance schedule.

**Requirement:** To prevent rotor blade failure due to possible cracks, bends and fretting which can result in loss of aircraft control, accomplish the following:

- Review the aircraft records and determine the hours TTIS for the rotor blades.
- If any blade has been in service beyond 700 hours TTIS, replace affected blades before further flight.

((UK CAA Emergency Mandatory Permit Directive 2011-006-E refers)

**Compliance:** Within the next 10 hours TIS.

**Effective Date:** 28 July 2011