

Airworthiness Directive Schedule

Gliders

Grob

24 November 2016

- Notes**
1. This AD schedule is applicable to Grob Werke GmbH & Co KG (formally Burkhart Grob) gliders manufactured under the following EASA and Luftfahrt-Bundesamt (LBA) Type Certificate Numbers:

Aircraft Model:	EASA/LBA Type Certificate Number:
Astir CS 77	A.250 (Formerly LBA TC L-306)
G102 Club Astir IIIB	A.250 (Formerly LBA TC L-306)
G102 Standard Astir III	A.250 (Formerly LBA TC L-306)
G103 Twin II	A.250 (Formerly LBA TC L-315)
G103A Twin II Acro	A.250 (Formerly LBA TC L-315)
G 103C Twin III SL	A.250 (Formerly LBA TC 869)
G109	817
Speed Astir IIB	A.250 (Formerly LBA TC L-320)
Standard Astir II	A.250 (Formerly LBA TC L-306)
Twin Astir	A.250 (Formerly LBA TC L-315)

2. EASA is the National Airworthiness Authority (NAA) responsible for the issue of State of Design Airworthiness Directives (ADs) for these aircraft. Applicable State of Design ADs can be obtained directly from the EASA web site. The link to the EASA web site is available on the CAA web site at http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html
3. The date above indicates the amendment date of this schedule.
4. New or amended ADs are shown with an asterisk *

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<p>From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) web site. The link to the NAA web site is available on the CAA web site at http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.....</p>		
2014-0067	Rudder Control Unit Cable Pulleys – Inspection and Replacement.....	20
2015-0116	Speed Brake Control System – Inspection	20
* 2016-0228	Tail Wheel Mounting Bracket – Inspection	20

DCA/BG/1 Control Unit - Inspection and Modification

Applicability: Model Twin Astir S/N 3000 through 3255

Requirement: Inspect and modify per B Grob Twin Astir TI TM 103-6
(Luftfahrt - Bundesamt AD-79-331 refers)

Compliance: Inspection - Before next flight and thereafter prior to first flight on each day glider is flown, until modified.

Modification - By 30 September 1979

Effective Date: 16 July 1979

DCA/BG/2 Inspection Panels - Modification

Applicability: Model Astir CS77 S/N 1601 and above

Requirement: To prevent possible interference with controls, tape inspection panel to prevent its entry into fuselage.

(Luftahrt - Bundesamt AD 80-96 refers)

Compliance: Prior to each flight until modified per B Grob TI TM306-13

Effective Date: 11 April 1980

DCA/BG/3 Canopy Fasteners - Modification

Applicability: Models speed Astir II and 11B S/N 4001 through 4107

Requirement: Modify per B Grob TI (TM) 320-2
(Luftahrt - Bundesamt AD 80-178 refers)

Compliance: By 30 November 1980

Effective Date: 29 August 1980

DCA/BG/4 Control System Links - Inspection and Modification

Applicability: Model Astir CS77 S/N 1601 and above. Model Twin Astir S/N 3000 through 3291

Requirement: Inspect and modify 'Hotellier Quick-Links' in control systems per Grob TI's TM306-16 or TM315-12 as applicable.

(Luftahrt - Bundesamt AD81-125 refers)

Compliance: Inspection - Before next flight and thereafter at intervals not exceeding 50 hours TIS until modified.

Modification - By 30 September 1981

Effective Date: 5 August 1981

DCA/BG/5 Elevator Installation - Inspection

Applicability: Model standard Astir S/N 5001 and above. Model speed Astir IIB S/N 4001 and above

Requirement: Check elevator installation for alignment per Grob TI's TM306-15 or TM320-3 as applicable and renew markings as necessary.

(Luftfahrt - Bundesamt AD's 80-304 and 80-303 refer)

Compliance: By 31 October 1981

Effective Date: 21 August 1981

DCA/BG/6 Rudder Pedal Installation - Inspection and Modification

Applicability: Model G103 `Twin 11' S/N 3501 through 3689

Requirement: Inspect and modify front pedal unit per Grob TI TM315-20 instructions 1, 2 and 3 respectively.

(Luftfahrt - Bundesamt AD 82-132 refers)

Compliance: Inspection per instruction 1 - before next flight unless already accomplished.

Inspection per instruction 2 - prior to each flight until modified.

Modification per instruction 3 - by 31 October 1982

Effective Date: 24 September 1982

DCA/BG/7 Canopy Hinge - Modification

Applicability: All model standard Astir II

Requirement: Modify canopy hinge installation per Grob SB TM 306-21.

(Luftfahrt - Bundesamt AD 83-43 refers)

Compliance: By 30 September 1983

Effective Date: 15 July 1983

DCA/BG/8A Rudder Pedal Installation – Inspection and Modification

Applicability: Model G102 Club Astir III aircraft, S/N all through 5569
Model G102 Club Astir IIIB aircraft, S/N all through 5568-Cb
Model G102 Standard Astir III aircraft, S/N all through 5564-S

Note: This AD revised to clarify the applicability.

Requirement: To prevent rudder pedal unit failure inspect and modify the pedal unit per instructions 1, 2 and 3 in Grob Technical Information TM 306-22.

(LBA AD 83-91 refers)

Compliance: Inspection per instruction 1 - Before further flight unless previously accomplished.

Inspection per instruction 2 - Before every flight until modified per instruction 3.

Modification per instruction 3 - By 30 April 2011 unless previously accomplished.

Effective Date: DCA/BG/8 - 15 July 1983
DCA/BG/8A - 31 March 2011

DCA/BG/9 Operating Limitations/Tachometer Calibration

Applicability: All model G109 with Hoffman - variable pitch propeller HO-V62 R/L 160T and Limbach L2000 series engine combination

Requirement: To preclude possible propeller failure accomplish the following:

1. In full view of pilot install placards which read
 - (a) `Avoid continuous engine operation above 2900 RPM'
 - (b) `Aerobatic manoeuvres using engine prohibited'
2. Calibrate Tachometer and install correction table adjacent to it.
(Luftfahrt - Bundesamt AD 83-150 refers)

Compliance: Placards - By 31 March 1984

Calibration - By 31 March 1984 and thereafter at intervals not exceeding 12 months

Effective Date: 2 March 1984

DCA/BG/10 Airbrake Locking Levers - Inspection

Applicability: Astir CS S/Ns 1001 through 1535; Astir CS 77 S/Ns 1601 through 1844; Astir CS JEANS S/Ns 2001 through 2248; Club Astir II & Standard Astir II S/Ns 5001 through 5061

Requirement: Inspect and replace airbrake locking levers in accordance with Grob TI TM306-26 instructions 1, 2, 3 and 4.

(Luftfahrt - Bundesamt AD 85-98 refers)

- Compliance:**
1. Incorporation of inspection hole per instruction 1 - before further flight.
 2. Incorporation of inspection window per instruction 2 - before 1 April 1986.
 3. Inspection per instruction 3 - before further flight and thereafter daily until instruction 4 accomplished.
 4. Replacement of cast locking levers per instruction 4 - when found cracked or after 3000 hours TIS.

Effective Date: 11 July 1985

DCA/BG/11 Undercarriage - Inspection and Replacement

Applicability: Model G109 S/Ns 6001 through 6159

Requirement: Inspect and replace main undercarriage in accordance with Grob TI TM817-19 instructions 1, 2 and 4.

(Luftfahrt - Bundesamt AD85-132 refers)

- Compliance:**
1. Inspection per instruction 1 - within next 3 flights.
 2. Inspection per instruction 2 - within next 3 flights and thereafter every 25 hours TIS and after heavy landing until undercarriage replaced per instruction 4.
 3. Replacement per instruction 4 - upon discovery of cracks during instruction 2 inspection

Effective Date: 11 July 1985

DCA/BG/12 Airbrake Operating Lever - Inspection

Applicability: Model G103 `Twin II' S/N 3501 through 3715
Requirement: Inspect per Grob TI TM315-29. Renew cracked or buckled levers before further flight
Compliance: By 10 January 1986
Effective Date: 23 December 1985

DCA/BG/13 Rudder Pedal Assembly - Inspection

Applicability: Model Twin Astir S/N 3000 through 3291
Requirement: Inspect per Grob TI TM315-30. Renew cracked levers before further flight
Compliance: By 10 January 1986
Effective Date: 23 December 1985

DCA/BG/14A Fuel Shut-off Valve - Piston Replacement

Applicability: All Model G109 and G109B
Requirement: Replace the fuel shut-off valve sealing piston per Grob SB TM 817-23/1.
(LBA AD87-142/2 refers)
Compliance: By 30 June 1993
Effective Date: DCA/BG/14 30 September 1987
DCA/BG/14A 19 March 1993

DCA/BG/15 Tow Release Installation - Inspection

Applicability: Model Twin Astir S/N 3000 through 3291 and G103 Twin II S/N 3501 through 3878
Requirement: Inspect per Grob SB TM315-32. Incorrectly positioned actuator knobs are to be re located per Grob Repair instructions no. 315-32 before further flight.
(LBA AD87-140 refers)
Compliance: By 30 November 1987
Effective Date: 23 October 1987

DCA/BG/16 Rudder Lever installation - Inspection and Modification

Applicability: Model G103 Twin II S/N 3730 through 3878
Requirement: Inspect and modify per Grob SB TM315-33 instructions 1 and 2 respectively.
Rectify damaged installation before further flight.
(LBA AD87-168 refers)
Compliance: Inspection - By 30 November 1987
Modification - By 31 January 1988
Effective Date: 23 October 1987

DCA/BG/17 Main Spar Spigot - Limitation, Inspection and Replacement

Applicability: Model Twin Astir S/N 3000 thru 3291; Grob G103 "Twin II" S/N 3501 thru 3878 and 33879 thru 34078. Grob G103A "Twin II Acro" (with supplement "K") S/N 3544 thru 34078

Requirement: 1. Install "NO AEROBATICS" placard in clear view of each cockpit occupant.
2. Inspect and replace spar spigots per Grob Technical Note TM315-36.
(LBA AD88-176 refers)

Compliance: 1. Placard - Prior to next flight.
2. Inspection - Gliders with 3000 or more flights, prior to next flight. Gliders with 1500 to 3000 flights, within next 3 months. Thereafter re inspect at intervals not exceeding 500 flights until spigots replaced.
3. Replacement - All gliders, prior to further flight if damage found, otherwise not later than 30 June 1989.

Placard may be removed after spigot replacement

Effective Date: 28 December 1988

DCA/BG/18 Flight Control System - Inspection and Modification

Applicability: Model G103 "Twin II", S/N 3501 through 3729 and 3730 through 3878; G103 "Twin II A ACRO", S/N 33879 through 34078

Requirement: Inspect and modify control system welded joints per Grob Technical Bulletin TM 315-37 instructions 1 and 2 respectively. Rectify cracked parts before further flight.
(LBA AD 88-175 refers)

Compliance: Inspection - By 31 July 19789
Modification - By 30 November 1989

Effective Date: 16 June 1989

DCA/BG/19 Elevator Hinges - Inspection

Applicability: Model G102, Club Astir IIIb with S/N 5501 Cb and subsequent; Standard Astir III with S/N 5502S and subsequent

Requirement: To prevent possible failure, inspect elevator hinges per Grob SB TM 306-27. Rectify defective installations before further flight.
(LBA AD 89-209 refers)

Compliance: By 31 March 1990

Effective Date: 23 February 1990

DCA/BG/20 Main Spar Spigot - Inspection and Replacement

Applicability: Model Astir CS 77 S/N 1601 through 1844, Standard Astir II S/N 5001 through 5061, Grob G102 "Club Astir IIIb" S/N 5501 and up, including those with suffix "Cb", Grob G102 "Standard Astir III" S/N 5502 and up, including those with suffix "S", and Speed Astir II B S/N 4028 through 4107

Requirement: 1. Inspect the main spigot assembly per Grob SB TM 306-29, TM 320-5. If cracks are found rectify as prescribed before further flight.
2. Replace the spar spigot assembly per the SB.
(LBA AD 91-5 refers)

Compliance: 1. Within next 10 hours TIS or 30 days, whichever is the sooner.
2. If no cracks are found and the distance between spigot plates and swivel bearing is:
(a) Less than or equal to 10mm, replace spar spigot assembly by 31 December 1992.
(b) Greater than 10mm, replace spar spigot assembly by 30 June 1991.

Effective Date: 21 January 1991

DCA/BG/21 Aileron Connector Fixing Bolts - Replacement

Applicability: Model Twin Astir S/N 3000 through 3291, Grob G103 "Twin II" (including Acro) S/N 3501 through 3729

Requirement: To prevent incorrect assembly of the aileron connector fixing bolts install new forkhead nuts and LN bolts per Grob SB TM 315-38/1.
(LBA AD 89-5/2 refers)

Compliance: By 31 May 1991

Effective Date: 22 February 1991

DCA/BG/22A Service Life - Inspection and Limitation

Applicability: Twin Astir S/N 3000 through 3291; Twin Astir Trainer S/N 3000 through 3291 (with suffix "T"); G103 Twin II S/N 3501 through 3878, 33879 through 34078; G103A Twin II Acro S/N 3544 through 34078 (with suffix "K"); G103C Twin III Acro S/N 34101 through 34170; and G103C Twin III S/N 36001 through 36014

Requirement: To extend service life to 12,000 hours accomplish the following:-
Implement inspection and modification program per Grob SB 315-45/2. Any defects found must be rectified before further flight.
(LBA AD92-190/2 refers)

Compliance: By 3000 hours TTIS and thereafter at intervals as detailed per SB 315-45/2, until a maximum of 12,000 hours TTIS.

Effective Date: DCA/BG/22 28 August 1992
DCA/BG/22A 6 June 1997

DCA/BG/23 Airbrake Stops - Inspection

Applicability: All Models, Series and S/Ns detailed in Grob SB TM 306-31, 315-49, 320-6, 817-36.

Requirement: To prevent jamming of airbrakes inspect per Grob SB TM 306-31, 315-49, 320-6, 817-36. Repair excessive wear as prescribed per the SB.

(LBA AD92-356 refers)

Compliance: By 30 June 1993

Effective Date: 19 March 1993

DCA/BG/24 Exhaust System - Inspection

Applicability: All Model G 109 and G 109B

Requirement: To prevent exhaust fumes entering the cockpit, inspect per Grob SB TM 817-32. If leaks are detected replace the exhaust system prior to further flight.

(LBA AD 92-359 refers)

Compliance: By 3 October 1993

Effective Date: 3 September 1993

DCA/BG/25 Service Life - Inspection and Limitation

Applicability: All Model G109 and G109B

Requirement: To extend service life to 12,000 hours accomplish the following:-

1. Inspect per G109 and G109B "Extension of Life Time" document issued 27 May 1991.
2. Install inspection hole in the lower wing shell per Grob Repair Instruction 817-28/1.
3. Replace both spar spigot assemblies per Repair Instruction 817-28/2.
4. The following inspections (visual inspection, tapping) must be accomplished:-

(a) Wing Root External

- Wing/Fuselage attachment fittings secure in laminate
- Wing connecting bolts for wear, corrosion, deformation

(b) Spar Stub

- Main spar spigot
- Spar pinfitting tight in laminate

(LBA AD 92-198 refers)

Compliance: 1. At 3000, 6000, 7000, 8000, 9000, 10000 and 11000 hours TTIS.

2. At 3000 hours TTIS.

3. At 3000 hours TTIS.

4. At 9500, 10500, and 11500 hours TTIS.

Effective Date: 3 September 1993

DCA/BG/26 Airbrake Over-centre Lever - Replacement

Applicability: Twin Astir S/N 3000 through 3275 and Twin Astir Trainer S/N 3000 through 3275 (with suffix "T")

Requirement: To prevent failure of the airbrake over-centre lever, replace lever per Grob SB TM 315-45.
(LBA AD 92-309/2 refers)

Compliance: By 31 March 1994 unless already accomplished per DCA/BG/22.

Effective Date: 3 September 1993

DCA/BG/27A Service Life - Inspection and Limitation

Applicability: Astir CS S/N 1001 through 1536; Astir CS 77 S/N 1601 through 1844; Astir CS Jeans S/N 2001 through 2248; Standard Astir II S/N 5001 through 5061 (suffix "S"); Club Astir II S/N 5001 through 5061 (suffix "C"); Standard Astir III S/N 5501 through 5652 (suffix "S"); Club Astir III S/N 5501 through 5652 (suffix "C"); Club Astir IIIb S/N 5501 through 5652 (suffix Cb).

Requirement: To extend service life to 12,000 hours accomplish the following:-
Implement inspection and modification program per Grob SB 306-30/2. Any defects found must be rectified before further flight.
(LBA AD 93-041 refers)

Compliance: By 3000 hours TTIS and thereafter at intervals as detailed per SB 306-30/2, until a maximum of 12,000 hours TTIS.

Effective Date: DCA/BG/27 3 September 1993
DCA/BG/27A 6 June 1997

DCA/BG/28 Main Landing Gear Legs - Inspection

Applicability: All Model G 109 and G109B

Requirement: To prevent MLG leg failure accomplish the following:-
1. Inspect and modify retaining bars per Grob SB TM 817-39, Part A.
2. Inspect landing gear legs per SB TM 817-39, Part B. Renew defective legs per SB TM 817-39, Part B before further flight.
(LBA AD 94-004 refers)

Compliance: 1. By 31 July 1994
2. At 2000 total landings and thereafter at intervals not to exceed 1000 landings.

Effective Date: 15 April 1994

DCA/BG/29 Rudder Damper and Bell Crank - Installation

Applicability: Model G109, S/N 6001 through 6159.

Requirement: To reduce the chance of flutter install rudder damper and a new rudder bell crank lever per Grob SB TM 817-38.
(LBA AD 94-262 refers)

Compliance: By 31 March 1995.

Effective Date: 23 December 1994

DCA/BG/30 Elevator Lever - Inspection and Replacement

Applicability: Astir CS S/N 1001 through 1536, Astir CS 77 S/N 1601 through 1844, Astir CS Jeans S/N 2001 through 2248.

Requirement: To prevent failure of the elevator control lever accomplish the following:-

1. Inspect the elevator lever P/N 102-3542 per Grob SB TM 306-33. If cracks are found, replace the lever per SB TM 306-33 before further flight.
2. Replace the lever P/N 102-3541 or 102-3542 with P/N 102-3543 per SB TM 306-33.

(LBA AD 94-317/2 refers)

Compliance:

1. Inspect by 7 August 1995
2. Replace by 30 November 1995

Effective Date: 7 July 1995

DCA/BG/31 Service Life - Inspection and Limitation

Applicability: Speed Astir II S/N 4001 through 4027 and Speed Astir IIb S/N 4028 through 4107.

Requirement: To extend service life to 12,000 hours accomplish the following:-
Amend the aircraft flight manual and maintenance manual per Grob SB 320-7. Implement the inspection program per SB 320-7. Any defects found must be rectified before further flight.
(LBA AD 1998-480 refers)

Compliance: By 30 June 1999 until a maximum of 12,000 hours TTIS.

Effective Date: 12 March 1999

DCA/BG/32 Control Stick Knurled Nut – Inspection and Replacement

Applicability: G103 Twin II, S/N 3501 through 3729
G103A Twin II Acro, S/N 3544 through 3729 (with suffix "K")

Requirement: To prevent failure of the knurled nut at the rear of the control stick, accomplish the following:

1. Inspect the nut for cracks and damage per Grob Technical Note 315-61/2. If the nut is cracked or damaged, replace the nut with one made from stainless steel per TN 315-61/2 before further flight.

2. Replace the nut with one made from stainless steel per TN 315-61/2.
(LBA AD 1999-216/2 refers)

Compliance:

1. Inspect before next flight and thereafter before the first flight of each day until replacement with one made from stainless steel per TN 315-61/2.
2. Replace by 31 December 1999.

Effective Date: 5 August 1999

DCA/BG/33B Elevator Flutter – Flight Limitation

Applicability: All Model G102 Standard Astir III, G102 Club Astir III, and G102 Club Astir IIIb.

Requirement: To avoid elevator flutter, the V_{NE} should be temporarily reduced to 89 KIAS, until additional mass balances are fitted to the elevators and ailerons.

1. Install a temporary redline limit at 89 KIAS on the airspeed indicator. Obscure or remove the existing redline limit, if the new limit is installed on the instrument glass, also install slippage marks on the glass and instrument case. Install a temporary locally manufactured placard on the instrument panel that reads: V_{NE} 89 KIAS.
2. Fit additional mass balances to the elevators and ailerons per Grob SB MSB306-36/3. Incorporation of MSB306-36/3 is terminating action for this AD and the V_{NE} restriction may be removed.

(LBA AD 2001-317/3 refers)

Compliance:

1. Before further flight unless already accomplished
2. By 31 January 2003

Effective Date: DCA/BG/33A - 31 January 2002
DCA/BG/33B - 31 October 2002

DCA/BG/34A CG Tow Hook Attachments - Inspection and Replacement

Applicability: Twin Astir, S/N 3000 through 3291
Twin Astir Trainer, S/N 3008 through 3291 (with suffix T)
G 103 Twin II, S/N 3501 through 3729
G103A Twin II Acro, S/N 3544 through 34078 (with suffix K)
G103C Twin III Acro, S/N 34101 onwards
G103C Twin III, S/N 36001 through 36014
G103 Twin III SL, S/N 35002 through 35051

Requirement: To prevent failure of the attachment of the CG tow hook, accomplish the following:

1. Inspect the forward attachment brackets, per Grob Service Bulletins MSB315-62 or MSB869-22, as applicable to glider model.

If brackets are found cracked, before further use of this hook, replace both brackets with the improved brackets P/N 103B-2360.01/1 & 103B-2360.02/1, per the applicable SB.

2. Replace both brackets with the improved brackets P/N 103B-2360.01/1 & 103B-2360.02/1 per the applicable SB.

(LBA AD 2002-066 and 2002-067 refer)

- Compliance:** 1. Inspect by 30 April 2006, unless already accomplished.
2. Replace brackets by 30 September 2006, unless already accomplished.

Effective Date: DCA/BG/34 - 28 March 2002
DCA/BG/34A - 30 March 2006

DCA/BG/35B Operational Limitations

Applicability: Twin Astir aircraft, S/N 3000 to 3291.
Twin Astir Trainer aircraft, S/N 3088 to 3291 (with suffix "T")

- Requirement:** To maintain safety margins against damage to the fuselage, accomplish the following:
1. Modify the red airspeed markings on the front and rear cockpit airspeed indicators and install new limitation placards on the front and rear cockpit side wall, per Grob ASB 315-64/3.
 2. Amend flight manual, per Grob ASB 315-64/3.

(LBA AD 2003-231 R3 refers)

Note: The speeds for flight in rough air, maximum operating speed and other operational speeds have been re-assessed. The reduced maximum permissible speed V_{NE} of 230 km/h is raised to the original V_{NE} of 250 km/h, and the speed in rough air V_B remains at 170 km/h. Aerobatic flights are provisionally prohibited. Simple acrobatic flight (Loops, Turns, Lazy Eight and Chandelle) may be performed in accordance with the Flight Manual.

Compliance: 1 & 2 Before next flight, unless already accomplished.

Effective Date: DCA/BG/35 25 September 2003
DCA/BG/35A 27 May 2004
DCA/BG/35B 26 May 2005

DCA/BG/36A Operational Limitations

Applicability: Model G 103 TWIN II, S/N: 3501 up to 3878 and 33879 up to 34078
Model G 103A TWIN II ACRO, S/N: 3544 up to 34078 (with Suffix "K")
Model G 103C TWIN III ACRO, S/N: 34101 up to 34203

- Requirement:** To maintain safety margins against damage to the fuselage, the speeds for flight in rough air, maximum operating speed and other operational speeds have been recalculated. Aerobatic flight for gliders previously equipped for aerobatic flight is prohibited until the rear fuselage is modified.
1. Insert revised pages into the Flight and Maintenance Manual in accordance with Service Bulletin No. MSB 315-65. Modify airspeed indicators and placards as detailed in the MSB.
 2. To regain the full capability for Aerobatic Flight for the G 103A TWIN II ACRO and G 103C TWIN III ACRO, perform the instructions of SB No. OSB 315-66 (installation of stringers in rear fuselage and cancellation of operational limitations).

(D-2004-002 refers)

- Compliance:**
1. Before 30 June 2004
 2. At owners discretion following compliance with Part 1.

Effective Date: 27 May 2004

DCA/BG/37B Elevator Attachment Bolts – Replacement and Manual Amendment

Applicability: Astir CS aircraft, S/Ns 1001 through 1536.

Requirement: To prevent failure of the attachment bolts of the elevator, due to the possibility of hidden damage remaining undetected, replace all the elevator spherical and collar bolts per Grob Service Bulletin MSB306-38/2, dated 08 June 2006 or later approved revisions and the Astir CS Maintenance Manual.

Amend the Astir CS aircraft Flight / Maintenance Manual by incorporating revision 9, dated 28 November 2005.

(EASA AD 2006-0150R1 refers)

Compliance: Before 27 October 2006, unless already accomplished, and thereafter replace all elevator spherical and collar bolts at intervals not to exceed 10 years or 1000 landings, whichever occurs sooner.

Effective Date: DCA/BG/37 - 24 June 2004
DCA/BG/37A - 29 June 2006
DCA/BG/37B - 27 July 2006

DCA/BG/38A Elevator Lever - Replacement

Applicability: Twin Astir and Twin Astir Trainer aircraft, all S/Ns.

Requirement: To prevent cracking of the cast alloy elevator control levers, replace them with new sheet aluminum items, per the instructions contained in Grob SB 315-67/1.

(LBA AD D-2004-292R1 refers)

Compliance: Before accumulating 3000 hours TTIS, or before 30 September 2005 whichever is later, if not already accomplished.

Effective Date: DCA/BG/38 - 30 September 2004
DCA/BG/38A - 26 May 2005

DCA/BG/39 Manifold Pressure Control Cable – Modification

Applicability: All model G 109B aircraft equipped with a Limbach L2400 DT1 engine.

Requirement: To prevent buckling of the manifold pressure Bowden control cable in the event of failure of the throttle lever spring, modify the manifold pressure control cable, per Korff Service Bulletin No. 817-40, dated 2 September 2005.

(LBA AD D-2005-357 refers)

Compliance: Within the next 10 hours TIS.

Effective Date: 23 February 2006

DCA/BG/40 Flight Control System Welded Components – Inspection and Replacement

- Applicability:** Model G102 Club Astir III aircraft, S/N 5501 onward (with suffix "C")
 Model G102 Club Astir IIIb aircraft, S/N 5501 onward (with suffix "Cb")
 Model G102 Standard Astir III aircraft, S/N 5502 onward (with suffix "S")
- Requirement:** To prevent failure of flight control system due to the possibility of cracks developing in control system welded parts which could result in loss of aircraft control, inspect the flight control system components per Grob Aerospace Service Bulletin No. MSB 306-35 dated 27 April 2007.
- Replace cracked parts per ASB No. MSB306-35, before further flight.
 (EASA AD 2007-0135-E refers)
- Compliance:** Within the next 25 hours TIS, or 50 flight cycles, or at the next annual inspection, or by 31 December 2007 whichever is the sooner, and thereafter at intervals not to exceed 12 months.
- Effective Date:** 18 May 2007

DCA/BG/41 Fuselage, Wing & Stabiliser Structure – Inspection and Repair

- Applicability:** Model Twin Astir aircraft, S/N 3000 through to 3291
 Model Twin Astir Trainer aircraft, S/N 3088 (T) through to 3291 (T)
 Model G103 Twin II aircraft, S/N 3501 through to 3878
 Model G103A Twin II Acro aircraft, S/N 3544 (K) through to 3878 (K) and 33879 (K) through to 34078 (K)
 Model G103C Twin III Acro aircraft, S/N 34101 through to 34203
 Model G103C Twin III aircraft, S/N 36001 through to 36014
 Model G103C Twin III SL aircraft, S/N 35001 through to 35051
- Requirement:** To prevent structural failure possibly resulting in loss of the aircraft, inspect the wings, fuselage and horizontal stabiliser per the instructions contained in Grob Aerospace Service Bulletin MSB 315-74/1, MSB 869-25/1 (same document).
- If any damage is found repair the aircraft in accordance with a manufacturer approved repair scheme, before further flight.
 (EASA AD 2007-0194-E and LBA AD D-2007-257 refer)
- Compliance:** Within the next 25 hours TIS, or 50 flight cycles, or at the next annual inspection, whichever occurs sooner.
- Effective Date:** 3 August 2007

DCA/BG/42 Airbrake Control System – Inspection and Rework

- Applicability:** All model G103 Twin II, G103A Twin II Acro, G103C Twin III Acro, G103C Twin III aircraft
 Model G103 Twin II aircraft, S/N 3730 through to 3878
 Model G103A Twin II Acro aircraft, S/N 3730 through to 34078 (K)
 Model G103C Twin III Acro aircraft, S/N 34101 through to 34203
 Model G103C Twin III aircraft, S/N 36001 through to 36014.

Requirement: To prevent failure of the airbrake bellcrank bolt due to the possibility of it being overtorqued which could result in loss of airbrake and elevator control, and reduced control of the aircraft, accomplish the following:

Remove bolt P/N LN9037-M6x60 from the airbrake bellcrank P/N 103B-4437 and fit a new bolt with a new locking nut P/N LN9348-M6, and torque the bolt to 6.4 Nm (4.72 ft.lbs).

Inspect the airbrake bell crank including the attachment parts for any damage. Replace any damaged parts before further flight.

Check the airbrake locking force on both wings using a spring balance. The locking force must be equal on both sides and ensure the airbrakes lock correctly. The locking force should be 10±2 daN, (22.48±4.5 lbs).

Check the airbrake locking force at the operating lever in the front cockpit with the wings rigged. The guidance value is 10±2 daN, (22.48±4.5 lbs). The locking force must not exceed 15 to 20 daN (33.70 to 44.96 lbs).

Accomplish the requirements of this AD per the instructions in Grob Service Bulletin No. MSB 315-76/1 dated 23 June 2008.

(LBA AD D-2008-232 refers)

Compliance: By 15 October 2008

Effective Date: 31 July 2008

DCA/BG/43 Airworthiness Directive Compliance - Grob G 103C Twin III SL Aircraft

Applicability: Model Grob G 103C Twin III SL aircraft, all S/N.

Note 1: This AD includes all those Luftfahrt-Bundesamt (LBA) ADs applicable to the Grob G 103C Twin III SL which have no recurring requirements. Compliance with each individual LBA AD is required before issue of a New Zealand Certificate of Airworthiness, or at the next ARA inspection after the effective date of this AD whichever is the sooner, unless previously accomplished. These aircraft are manufactured under LBA TC No. 869.

Requirement: Compliance with the following LBA Airworthiness Directives (as applicable) are required:

LBA AD:	Subject:	Service Bulletin:
1992-306/2	Main Wheel Fairing & Mod	Grob TM 869-3 and TM 869-9
1992-352	Upper Pulley Wheel	Grob TM 869-4
1992-354	Spindle Drive Spiral Pin	Grob TM 869-5
1992-355	Propeller Brake Spiral Pins	Grob TM 869-6
1992-367	Electrical Variable Pitch MTV Propellers	MT Propeller TM No. 6
1992-388	Fuel Filters	Grob TM 869-11
1993-014	Arrestor Cable Guide	Grob TM 869-10
1993-079	Propeller Switch	Grob TM 869-13
1993-224	Propeller Flange	Grob TM 869-16
D-2008-231	Airbrake Control System	Grob MSB 869-27/1

Note 2: Each part of this AD (each individual LBA AD) shall be certified in the aircraft log book separately.

Note 3: Copies of the LBA ADs can be obtained from the CAA Library at library@caa.govt.nz

Compliance: Before issue of a New Zealand Certificate of Airworthiness, or at the next ARA inspection after the effective date of this AD whichever is the sooner, unless previously accomplished.

Effective Date: 25 February 2010

DCA/BG/44 Propeller Bearing – Inspection and Modification

Applicability: Model Grob G 103C Twin III SL aircraft, all S/N.

Note 1: This AD issued with the type acceptance of model Grob G 103C Twin III SL aircraft manufactured under LBA Type Certificate No. 869.

Requirement: To prevent failure of the propeller bearing due to possible increased bearing play which can result in rotation of the outer bearing races, damage to the grooved nut and loss of the propeller, accomplish the following:

1. For all S/N aircraft:

Inspect the propeller bearing per the instructions in Grob SB No. 869-18 dated 7 March 1996 and amend the aircraft maintenance manual per Grob SB-No. 869-18/2 dated 8 July 1996.

2. For all S/N aircraft:

Modify the propeller bearing per the instructions in SB No. 869-18 and check the torque value of the grooved nut per SB No. 869-18/2.

3. For aircraft S/N 35002 all through 35051:

Reinstall and retorque the grooved nut of the upper wheel per the instructions in Grob MSB No. 869-18/3 dated 24 May 2002.

4. For aircraft S/N 35002 all through 35051:

Amend the aircraft maintenance per the instructions in MSB No. 869-18/3.

Note 2: Grob SB No. 869-18 dated 7 March 996, SB No. 869-18/2 dated 8 July 1996 and MSB-No. 869-18/3 dated 24 May 2002 and later LBA or EASA approved revisions pertain to the subject of this AD.

Compliance:

1. Before further flight unless previously accomplished and thereafter at intervals not to exceed 5 hours TIS until requirement 2 is accomplished.
2. By 25 March 2010 unless previously accomplished.
3. Within the next 5 hours TIS unless previously accomplished.
4. By 25 March 2010 unless previously accomplished.

Effective Date: 25 February 2010

DCA/BG/45 Water Ballast Hose Connectors – Inspection and Repair

Applicability: Model Astir CS, Astir CS 77, Standard Astir II, G 102 Standard Astir III, Twin Astir, Speed Astir II and Speed Astir IIb aircraft, all S/N which are fitted with a water ballast system.

Note 1: The water ballast system could have been embodied by a modification.

Requirement: To prevent failure of the water ballast hose connectors at the fuselage wall due to possible debonding which can result in loss of aircraft control due to the displaced water changing the aircraft center of gravity, or the loose hose jamming the flight control system, accomplish the following:

1. Inspect the bonding between the water ballast system hose connectors and the fuselage wall connectors for security per paragraph 1.8 of Grob Aircraft Service Bulletin (SB) No. MSB-Grob-003 dated 21 October 2009 or later EASA approved revisions.

If a defective bond is found, repair the connection between the water ballast system hose connectors and the fuselage wall connectors per paragraph 1.8 of the SB No. MSB-Grob-003 before further flight.

2. When installing a water ballast system on an affected aircraft, ensure that the water ballast system hose connectors and the fuselage wall connectors are correctly installed and securely bonded.

Note 2: The repetitive inspections required by this AD may be terminated if the following maintenance task is introduced in the aircraft maintenance program: "At every annual inspection (ARA) or at intervals not to exceed 12 months, inspect the bonding between the water ballast system hose connectors and the fuselage wall connectors for correct and tight connection, and repair as required".

(EASA AD 2010-0053R1 refers)

Compliance:

1. By 29 May 2010 unless previously accomplished, and thereafter at intervals not to exceed 12 months.
2. From 29 April 2010.

Effective Date: 29 April 2010

DCA/BG/46 Propeller Assembly – Inspection and Repair

Applicability: Model G 103 C Twin III SL aircraft, all S/N.

Requirement: To prevent an in-flight loss of the propeller and pulley wheel due to possible incorrect propeller tracking (the play at the propeller tip) and/or damage to the propeller nut securing plate, accomplish the following:

Amend the AFM and the AMM per the instructions in Grob Aircraft AG SB No. MSB-869-24/1 dated 20 July 2009 or later EASA approved revisions.

Inspect the propeller nut securing plate for cracks in the bend of the securing plate lock tab.

Determine whether the propeller track (the play at the propeller tip) is within the allowable tolerances specified in the applicable manufacturer's maintenance instructions in Grob Aircraft AG Service Letter No. SL-869-01 dated 9 June 2009 or later EASA approved revisions.

If no cracks are found in the bend of the propeller nut securing plate lock tab and the propeller track is found outside the allowable tolerances, readjust the torque of the propeller attachment nut per the applicable manufacturer's maintenance instructions before further flight.

If any cracks are found in the bend of the propeller nut securing plate lock tab accomplish the following actions:

- Remove the propeller attachment nut and bend an unused tab on the lock plate to secure the propeller nut. A tab which has been previously used may not be reused. If all the tabs of the securing plate have been already bent, replace the securing plate with a serviceable part.
- Fasten the propeller attachment nut (and the securing plate) and torque per the applicable manufacturer's maintenance instructions, and determine that the propeller tracks within the allowable tolerances.

Note 1: The manufacturer maintenance instructions to accomplish the actions of this AD are listed in the Grob Aircraft AG Service Letter No. SL-869-01 dated 9 June 2009 or later EASA approved revisions.

Note 2: The propeller assembly attachment nut torque values and tolerances specified in the AFM and AMM have been revised.

(EASA AD 2010-0107 refers)

Compliance: By 24 July 2010

Effective Date: 24 June 2010

DCA/BG/47 Vertical Stabiliser Nose Plate – Inspection and Replacement

Applicability: Model Grob G 109 and Grob G 109 B aircraft, all S/N.

Requirement: To prevent vertical stabiliser nose plate failure, accomplish the following:

1. Inspect the nose plate P/N 109-2160.01 in the vertical stabiliser per the instructions in action A of Grob MSB MSB817-58 dated 24 November 2011 or later approved revisions.

If any corrosion and/or flaking is found replace the nose plate with a serviceable part before further flight per Grob Repair Instruction RI817-009 dated 17 November 2011 or later approved revisions.

2. Install an access panel on the left side of the vertical stabiliser per the instructions in Grob MSB817-060 dated 24 November 2011 or later approved revisions. Inspect the nose plate P/N 109-2160.01 in the vertical stabiliser per the instructions in action B of Grob MSB817-58.

If any corrosion and/or flaking is found replace the nose plate with a serviceable part before further flight per Grob Repair Instruction RI817-009.

Note: The replacement of a nose plate is not a terminating action for the repetitive inspections required by this AD.

(EASA AD 2012-0027 refers)

Compliance: 1. Within the next 10 hours TIS or by 28 April 2012 whichever occurs sooner unless previously accomplished and thereafter at intervals not to exceed 100 hours TIS.

2. At the next 50 hour maintenance inspection or by 28 May 2012 whichever occurs sooner, and thereafter at intervals not to exceed 100 hours TIS accomplish the inspection per requirement 2.

Effective Date: 28 February 2012

DCA/BG/48 Elevator Control Rod in Vertical Fin – Inspection and Replacement

Applicability: Model Grob G 109 and Grob G 109 B powered gliders, all S/N.

Requirement: To prevent failure of the elevator control rod which could result in loss of aircraft control, accomplish the requirements in EASA AD 2012-0181.

Note 1: A copy of EASA AD 2012-0181 can be obtained from the EASA AD website at <http://www.easa.eu.int/certification/airworthiness-directives.php>

Note 2: Grob Aircraft AG MSB817-64, dated 13 July 2012 or later approved revisions of this document are acceptable to comply with the requirements of this AD.

(EASA AD 2012-0181 refers)

Compliance: At the compliance times specified in EASA AD 2012-0181.

Effective Date: 21 September 2012

From 1 October 2012 the Civil Aviation Authority of New Zealand (CAA) will no longer rewrite the text of State of Design ADs. Applicable State of Design ADs will be listed below and can be obtained directly from the National Airworthiness Authority (NAA) web site. The link to the NAA web site is available on the CAA web site at

http://www.caa.govt.nz/Airworthiness_Directives/states_of_design.html

If additional NZ ADs need to be issued when an unsafe condition is found to exist in an aircraft or aeronautical product in NZ they will be added to the list below.

[2014-0067](#) Rudder Control Unit Cable Pulleys – Inspection and Replacement

Effective Date: 1 April 2014

[2015-0116](#) Speed Brake Control System – Inspection

Effective Date: 8 July 2015

* **[2016-0228](#)** Tail Wheel Mounting Bracket – Inspection

Effective Date: 28 November 2016