

## Grob (Germany)

Status	Subject	Detail	Reference information	TNS
<b>Contact:</b> UK Agent Soaring Oxford 01636 525318 (Technical, Tim Dews, Airborne Composites 01985 840981)				
LBA & EASA Airworthiness Directives <a href="http://www.lba.de/cln_001/nn_57338/EN/CertificationAirworthiness/ADs/ADs_node.html_nnn=true">http://www.lba.de/cln_001/nn_57338/EN/CertificationAirworthiness/ADs/ADs_node.html_nnn=true</a> <a href="http://ad.easa.europa.eu/">http://ad.easa.europa.eu/</a>				
Grob G102 and G104 Astir AD's have been reformatted. For copies Service Bulletins please refer to Grob web site for download or contact Soaring Oxford. <a href="http://www.grob-aerospace.net/index.php?id=371">http://www.grob-aerospace.net/index.php?id=371</a>				
<b><u>G102 Astir CS</u></b>				
M	Towing equipment	Reinforcement of tow hook attachment s/n 1001 - 1175	AD 76-226, SB 102-3	08/76
M	Controls	Bolt security s/n 1001 – 1234, 1300 – 1315	AD 76-273, SB 102-4	08/76
M	Tow release	Pulley bearings and cable s/n 1070 – 1199, 1300 – 1315	AD 77-235, SB 102-6	11/77
M	Controls	Aileron stops s/n 1001 – 1536	AD 77-255, SB 102-7	09/77
M	Controls	Rudder control lever s/n 1180 – 1536, 1613 – 1679, 2001 – 2032	AD 78-30, SB 102-8	03/78
M	Fuselage	Insp cover safety device s/n 1029 on, 1601 on, 2001 on	AD 80-96, SB 306-13	06/80
M	Controls	Hotellier connections change s/n 1001 on, 1601 on, 2001 on	AD 81-125, SB 306-16	
M	Tail plane	Replace retention ball s/n 1001 on	AD 81-126, SB 306-17	09/81
M	Service life	Increase of life s/n 1001 on, 1601 on, 2001 on	AD 81-267, SB 306-18	
M	Controls	Air brake lever change s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 – 5061	AD 85-98, SB 306-26	06/85
M	Controls	Inspection of elevator hinges s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 on, 5501 on	AD 89-209/2, SB 306-27/1	08/91
M	Structure	Inspection & replacement of spar spigot s/n ALL	AD 91-5/2, SB 306-29	08/91
M	Service life	Increase of life s/n ALL	AD 93-41, SB 306-30/2	06/96
M	Controls	Inspection of air brake stops s/n ALL	AD 92-356, SB 306-31	12/92
M	Controls	Exchange of elevator lever s/n 1001 – 1536, 1601 – 1844, 2001 – 2248	AD 94-317/2, SB 306-33	06/95
M	Tail plane	Inspection of vertical stab attachment s/n 1001 – 1536	AD 2006-0150 (2004-168), MSB 306-38	3-2006

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<b><u>G102 Astir CS77 &amp; Astir Jeans</u></b>				
M	Controls	Rudder control lever s/n 1180 – 1536, 1613 – 1679, 2001 – 2032	AD 78-30, SB 102-8	03/78
M	Fuselage	Insp cover safety device s/n 1029 on, 1601 on, 2001 on	AD 80-96, SB 306-13	06/80
M	Controls	Hotellier connections change s/n 1001 on, 1601 on, 2001 on	AD 81-125, SB 306-16	
M	Service life	Increase of life s/n 1001 on, 1601 on, 2001 on	AD 81-267, SB 306-18	
M	Controls	Air brake lever change s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 – 5061	AD 85-98, SB 306-26	06/85
M	Controls	Inspection of elevator hinges s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 on, 5501 on	AD 89-209/2, SB 306-27/1	08/91
M	Structure	Inspection & replacement of spar spigot s/n ALL	AD 91-5/2, SB 306-29	08/91
M	Service life	Increase of life s/n ALL	AD 93-41, SB 306-30/2	06/96
M	Controls	Inspection of air brake stops s/n ALL	AD 92-356, SB 306-31	12/92
M	Controls	Exchange of elevator lever s/n 1001 – 1536, 1601 – 1844, 2001 – 2248	AD 94-317/2, SB 306-33	06/95
<b><u>G102 Astir Std II and Club II</u></b>				
M	Canopy	Exchange of canopy springs s/n 5001 – 5061	AD 80-177, SB 306-14	08/80
M	Tail plane	Markings s/n 5001 on	AD 80-304, SB 306-15	
M	Canopy	Exchange hinge s/n 5001 on	AD 83-43, SB 306-21	06/83
M	Service life	Increase of life s/n 5001 on	AD 84-7, SB 306-23	
M	Controls	Air brake lever change s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 – 5061	AD 85-98, SB 306-26	06/85
M	Controls	Inspection of elevator hinges s/n 5001 on, 5501 on	AD 89-209, SB 306-27	10/94
M	Controls	Inspection of elevator hinges s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 on, 5501 on	AD 89-209/2, SB 306-27/1	08/91
M	Structure	Inspection & replacement of spar spigot s/n ALL	AD 91-5/2, SB 306-29	08/91
M	Service life	Increase of life s/n ALL	AD 93-41, SB 306-30/2	06/96
M	Controls	Inspection of air brake stops s/n ALL	AD 92-356, SB 306-31	12/92
M	Canopy	Modification to jettison system s/n 5001 – 5061	AD 2003-238, SB 306-37	08/03

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Status	Subject	Detail	Reference information	TNS
<b><u>G102 Astir Club III, Std III &amp; Club IIIb</u></b>				
M	Controls	Exchange of rudder pedal slide s/n 5501 – 5569	AD 83-91, SB 306-22	06/83
M	Service life	Increase of life s/n 5501 on	AD 84-57, SB 306-24	
M	Controls	Inspection of elevator hinges s/n 5001 on, 5501 on	AD 89-209, SB 306-27	10/94
M	Controls	Inspection of elevator hinges s/n 1001 – 1536, 1601 – 1844, 2001 – 2248, 5001 on, 5501 on	AD 89-209/2, SB 306-27/1	08/91
M	Structure	Inspection & replacement of spar spigot s/n ALL	AD 91-5/2, SB 306-29	08/91
M	Service life	Increase of life s/n ALL	AD 93-41, SB 306-30/2	06/96
M	Controls	Inspection of air brake stops s/n ALL	AD 92-356, SB 306-31	12/92
M	Controls	Elevator flutter reduction of Vne and increase of mass balance s/n 5501 on	AD 2001-317/4, SB 306-36/2 &/3	12/01
M	Structure	Inspection of welded parts s/n 5501 on	AD 2007-0135-E, SB 306-35	3-2007
<b><u>G320 (G104) Speed Astir, Speed Astir II</u></b>				
M	Canopy	Canopy fasteners s/n 4001 - 4107	AD 80-178, SB 320-2	08/80
M	Controls	Elevator markings s/n 4001 on	AD 80-303, SB 320-3	
M	Structure	Insp & replacement of wing spar spigors s/n 4001 - 4107	AD 91-5/2, SB 320-5	02/91
M	Controls	Insp of air brake stops s/n 4001 - 4107	AD 92-356, SB 320-6	12/92
M	Service life	Extension of life s/n 4001 - 4107	AD 1998-480, SB 320-7	02/99
M	Canopy	Modification to jettison system s/n 4001 - 4107	AD 2003-238/2, SB 320-8	08/03
<b><u>Astir In Service Reports (Advisory)</u></b>				
	Aileron connectors	disconnect & rods jam		10/87 & 08/79
	Speed brake paddle	lever arm cracked		03/82 & 12/83
	Aluminium fuselage main frames	inspect frequently for cracks		04/84
	Lower rudder hinge	(not CS) cracks in GRP		06/85
	Elevator control rods	corroded in rear fuselage		08/87
	Elevator vertical drive	loose rivets		08/87
	Wing to fuselage attachments	balls missing (should be six per socket)		10/87

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Status	Subject	Detail	Reference information	TNS
	Retractable u/c hinge bars	circlips come off - replace with split pins		12/98 & 06/88
	Undercarriage lever retaining bolt	loose in GRP		06/92
	Frame at base of the fin	fractured by ground loops - causes tail end flutter		06/95 & 04/95
	Tow hook back release	If wire launched with adverse yaw may have difficulty Releasing		02/00
	Tailplane mounting	Location ball thread cracked (AD inspection)		12/05
	Tailplane location pins	Flanges cracked		12/05
	Tailplane mountings	Continued problems with Spherical ball mounting. New mounting immanent.		1/2006

### Twin Astir, Twin Astir Trainer, G-103 Twin II, G-103A Twin II Acro, G-103C Twin III & Twin III Acro

M	Airbrake locking lever	replace with solid type	serial numbers→3040	AD 79-258, TN 103-5	06/79
M	Aileron & airbrake controls	screws loose	serial numbers→3255	AD 79-331, TN 315-6	08/79
M	Controls	Change elevator trim tube		TN 315-13	05/81
M	L'Hotellier connectors	replace with stronger type		AD 81-125/2, TN 315-12	09/81
M	Flight manual	correction of pages		AD 83-6	
M	Rudder Pedals	Inspection		AD 82-132, TN 315-20	
M	Cable release knob	jams ailerons - modify			12/83
M	Airbrake lever failure (front)	replace		AD 85-222, TN 315-29	12/85
M	Rear rudder pedals	parallel lever - replace		AD 85-191, TN 315-30	12/85
M	Airbrake stops fail	levers foul wing skins & jams brakes out		AD 85-236, TN 315-31	12/85
M	Front canopy lock	colour code for open/shut			08/87
M	Aft hook release knob	modifications to prevent it jamming the stick		AD 87-140, TN 315-32	08/87
M	Rear rudder pedal lever	replace		AD 87-168, TN 315-33	10/87
M	Elevator push-rod	corrosion (G 103A) lower end of fin rod		AD 88-1, TN 315-14	04/88
M	Wing root end spigots	replace		AD 88-176, TN 315-36	10/88
M	Control systems (G 103 & 103A)	inspections & mods		AD 88-175, TN 315-37	10/88
M	Foul between aileron & airbrake controls in centre section			AD 89-5/2TN 315-38	02/89
M	Airbrake handle (G 103C Acro III)	fit new hinged lever		TN 315-39	08/89
M	Rudder pedal unit (G-103C only)	fit new spindle & guide		TN 315-41	12/89
M	Aileron lever	placard for correct assembly		AD 89-005/2, TN 315-38/1	06/90
M	Airbrake stops	inspection		AD92-356, TN 315-49	12/92

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Status	Subject	Detail	Reference information	TNS
M	Life extension	to 6000 hrs	AD 81-268, TM 315-15	
M	Life extension	from 3000 to 12 000 hrs. after inspections & mods	AD 92-190/2, SB 315-45/2	08/96
M	Airbrake lever (over centre)	replace	AD 92-309/2, TN 315-47/2	04/93
M	G.103 Twin III	extended limitations	AD 93-134	08/93
M	Emergency exit	fit placard detailing procedure		06/96
	Option to remove belly hook	fit dummy hook (aerotow only)	TM 315-35/2	04/98
M	Rear stick knurled nut cracks	replace	AD 1999-216, SB 315-61/2	08/99
M	Service life	Inspections at 3000 hrs	AD 84-58, TN315-26	
M	Elevator	incorrect rigging, fit markings	AD 81-53, TM 315-11	
M	Tow hook	C of G hook bracket inspection	AD 2002-066 AD 2002-67, MSB 869-22 & 315-62	04/02
M	Limitations	Flight limitations	AD 2003-231/2, ASB215-64/2	02/04
M	Limitations	Lifting of flight restrictions (some aircraft)	AD D2004-002, MSB315-65	02/04
M	Flight controls	Elevator lever replacement	AD-D-2004-292 R1, MSB315-67	04/05
M	Limitations	revised limits of operation	AD 2003-231R3, MSB 315-67	12/04
M	Aircraft Documentation	Check and amend manuals	AD-D-2006-057, MSB 315-68	2-2006
M	Flying Controls	Inspection of rudder hinge for cracks	MSB 315-72, MSB 869-32	6-2006
M	Structural	Carry out structural inspections	AD 2007-0194, MSB 315-74/1, MSB 869-25/1	4-2007
<a href="#">M</a>	<a href="#">Flying controls (Twin III SL)</a>	<a href="#">Airbrake control bolt cracking due excessive torque</a>	<a href="#">AD D-2008-231, MSB 869-27/1</a>	<a href="#">4-2009</a>
<a href="#">M</a>	<a href="#">Flying controls (Twin Astir)</a>	<a href="#">Airbrake control bolt cracking due excessive torque</a>	<a href="#">AD D-2008-232, MSB 315-76/1</a>	<a href="#">4-2009</a>

### Twin Astir In Service Reports (Advisory)

Wheel brake back plate	torque stud fractured		07/78
Rudder cables	damaged at "S" bends		06/84, 06/05
Airbrake lever failure (front)	failure		10/98
Side hinged rudders	delamination of fin skin at hinges		08/86
Aileron mass balance	cracks - inspect		02/86 & 04/89
Tow hook	front mounting bracket cracked		02/91 & 10/89
Manual & placard amendments	G-103C only	TN 315-40	12/89
Rudder drive	failure at fork end at rudder		06/90
Wing to fuselage joiners	inspect after ground loops		02/91
Rudder cable pulleys	cracked		01/93 & 12/94
Front rudder pedals (G 103C)	slide rod fractured		06/96

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Status	Subject	Detail	Reference information	TNS
	Canopy jettison handles	disengaged from jettison systems - check		08/97
	Rear release cable	jams between panel & coaming. Hook held open		10/97
	Airbrake over-centre adjustment	must be correct to avoid un-demanded opening		12/97
	Front rudder pedals	mounting plate partial disbonding - inspect		12/98
	Control cables	Cable release failed at swage at release hook arm		04/00
<b><u>Grob G-103 Twin 3 SLMG</u></b>				
M	Drive belt failure	upper pulley wheel inspection	AD 92-352, TM 869-4	12/92
M	Transmission drive pin	replace	AD 92-354, TM 869-5	12/92
	Cable release	swage failed		04/00
M	Landing Gear	Wheel fairing and modifications	AD1992-306/2	
M	Propeller	Check and securing of spiral pins	AD1992-355	
M	Fuel system	Inspection of Fuel filters	AD1992-388	
M	Exhaust	Installation of cable guide	AD1993-014	
M	Propeller	Exchange of switch	AD1993-079	
M	Propeller	Exchange of propeller flange	AD1993-224	
M	Propeller	Inspection & improvement of bearing	AD1996-206/2	08/02
M	Controls	L'Hotellier ball & socket with lock plates	AD 1993-001/3	
M	Controls	L'Hotellier ball & socket with locking cams	AD 1994-001/2	
M	Tow release	Cracks at the forward attachment brackets	AD2002-066	
M	Flying Controls	Inspection of rudder hinge for cracks	MSB 315-72, MSB 869-32	6-2006
<b><u>Grob G-109 &amp; G-109B</u></b>				
M	Flight manual revisions		AD 83-6, TN 817-8	
M	Main landing gear	fractures. inspection and exchange legs	AD 85-132, TN 817-19	12/84
M	Flight manual revision	C of G range and spin recovery	AD 83-104, TN 817-10	06/85
M	Flight manual changes	mandatory	TM 817-17	06/85
M	Flying controls	modifications to avoid aileron flutter	AD 85-218/2, TN 817-20	12/86
M	Flight and maintenance manuals	change of pages	AD 86-219, TN 817-22	
M	Elevator two inner hinges	replace	AD 88-50, TN 817-25	04/88
	Quiet exhaust system	non-mandatory mod	TM 817-26	06/90

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Status	Subject	Detail	Reference information	TNS
M	Bendix Magnetos (G 109B)	impulse coupling inspection	AD 92-189, TN 817-34/2	08/92
M	Aileron & airbrake bell crank	attachments corroded	AD 90-315, TN 817-29	06/92
M	Extension of service life	beyond 3 000 hrs after inspections & mods	AD92-198, TN 817-28/1	08/92
M	Elevator and trim tabs	drain holes	AD 92-350, TN 817-35	12/92
	Exhaust system -	leaks & install CO <sub>2</sub> detectors & 100 <sup>hr</sup> inspections	AD92-359, TN 817-32	12/92
M	Airbrake stops	inspection	AD 92-356, TN 817-36	12/92
M	Fuel cock	replacement of seal	AD 87-142/2, TN 817-23/1	12/92
M	Undercarriage	1000 flight inspections and change of parts	AD 94-004, TN 817-39	10/93 & 04/94
	Carb float valves & diaphragms	inspection	TM 4601-7	02/94
	Valve seats	inspection	TM 4601-8	12/94
M	Spark plugs	Champion REN 30 S approved	TM 4601-9	12/94
M	Engine operator's manual	new introduced	TM 4601-10	12/94
M	Rudder system	fit damper and new bellcrank	AD 94-262, TM817-38	12/94
M	Engine mounting frames (G109 B)	inspect for abrasions	AD 95-362, TM 871-45	12/95
M	G109B - CAA flight manual change	quoted performance reduced	CAA Ref 1236/41491	04/99
	Unleaded fuel permitted after mods (banned by CAA - AN 98/98A)		SB.817-46	02/00 & 08/99
	Fuel filter	Replacement of fuel filter	SL 109-1	06/00
R	Flying controls	inspection of air brake control rod	BGA 022/10/2001 iss1	10/01
R	Flying controls	inspection of elevator control rod	BGA 036/06/2003 iss1	06/03
M	Controls	L'Hotellier ball & socket with lock plates	AD 1993-001/3	
M	Controls	L'Hotellier ball & socket with locking cams	AD 1994-001/2	
M	Engine controls	Broken throttle lever spring (L2400 engine)	AD D-2005-357, SB817-40	10/05

### G109 In Service Reports (Advisory)

	Corrosion of bolts	in wing root attachments		06/91
	Hot air shutter valves	cracked, failed & and butterfly screws loose	10/86, 12/92 &	10/91
	Rudder	bell crank cracked & failed		08/92
	Pulleys in wheel brake system	cracked replace nylon with aluminium		04/94
	Tail wheel springs	damage rudder push-rod		06/97
	Pitch change bolt failure	various causes detailed in TNS		02/98
	Canopy jettison control	jammed by screws that attach roof trim		06/98
I	Engine oil sump (G109 B)	Oil sump plug & oil cooler unions loose, check & wire lock		06/03

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