THE GLIDING FEDERATION OF AUSTRALIA

GFA AD 539
(ISSUE 1)

CANCELLED 21/05/2019

REFER TYPE CERTIFICATE HOLDERS CURRENT DATA

GFA AIRWORTHINESS DIRECTIVE

TYPE AFFECTED:	LS8, Version LS8-18 only, all serial numbers with English manuals.
SUBJECT:	Maintenance Manual amendments.
BACKGROUND:	Corrections and clarifications to English version of above manual
DOCUMENTATION:	The attached Rolladen-Schneider Technical Bulletin No 8008 forms part of this AD.
ACTION REQUIRED:	Exchange pages in the Maintenance Manual in accordance with the requirements of TB 8008.
WEIGHT AND BALANCE:	Not affected.
IMPLEMENTATION:	Before next Form 2 inspection.
COMPLIANCE:	The requirements of this GFA Airworthiness Directive are mandatory. This Directive is issued pursuant to the Rules and Regulations of the Gliding Federation of Australia.

SIGNED: Mike Valentine	For and on behalf of:
For CHIEF TECHNICAL OFFICER AIRWORTHINESS	THE GLIDING FEDERATION OF AUSTRALIA

Rolladen-Schneider Flugzeugbau GmbH LBA-No. EB-4 / I-B16	Technical Bulletin No. 8008	LS8-18	Page 1 of 1 Edition 06.Apr.2000

Subject: Maintenance Manual in English language.

Effectivity: **LS8, Version LS8-18 only, all serial numbers with Manuals in English language.**

Accomplishment: Before next Annual Inspection.

Reason: Various corrections and clarifications, thanks to DOT Canada.

Material and Instructions: By the operator:
Exchange the following pages of Maintenance Manual against Edition Feb. 2000: 0-2, 0-3, 0-4, 1-5, 1-9, 2-1, 2-4, 2-5, 5-1, 5-2.

Weight and Balance: Not affected.

Remarks: Accomplishment by the Operator.

Accomplishment must be entered into page 14-1 TB-AD-Accomplishment List in Maintenance Manual by inspector during next annual inspection.

LBA-approved:

LUFTFAHRT-BUNDESAMT 10 BRAUNSCHWEIG

11. 07. 00

Prepared: 6. April 2000 Heucke	Verified: Wiesike

Contents

Addendum:
- valid Weighing Report and Equipment List
- valid Control Surface Mass, Moment and Deflection Lists
- Excerpt of Safety Harness FAG-12 Maintenance Manual (when fitted)
- Maintenance Manual of Tow Hooks

It is recommended to use the Maintenance Manual together with the Flight Manual. This will provide the operator with additional information regarding systems, handling, servicing and maintenance instructions not found in this Manual.

Erstellt:	Geprüft:	Complies:

Log of Revisions

No.	Pages affected	Description	LBA-Approval Signature / Date
1	0-2, 0-3, 0-4, 1-2, 1-9, 2-1, 2-4, 2-5, 5-1, 5-2	Various corrections, (Edition Feb. 2000)	11. 07. 00

Pages included

Chapter	Page	Date
0	0-1	July 1999
	0-2	*Feb. 2000*
	0-3	*Feb. 2000*
	0-4	*Feb. 2000*
1	1-1	July 1999
	1-2	July 1999
	1-3	July 1999
	1-4	July 1999
	1-5	Feb. 2000
	1-6	July 1999
	1-7	July 1999
	1-8	July 1999
	1-9	*Feb. 2000*
2	2-1	*Feb. 2000*
	2-2	July 1999
	2-3	July 1999
	2-4	*Feb. 2000*
	2-5	Feb. 2000
	2-6	July 1999
3	3-1	July 1999
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	3-3	July 1999
	3-4	July 1999
4	4-1	July 1999
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	4-4	July 1999
	4-5	July 1999
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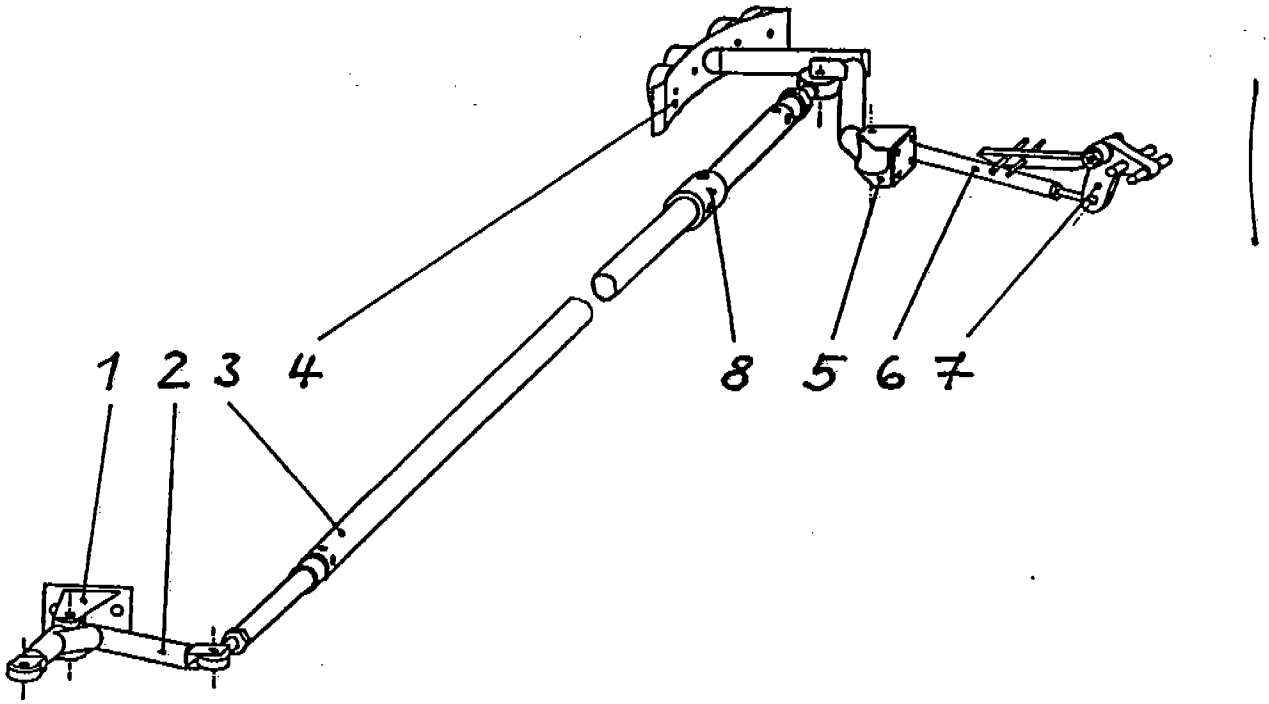
	4-9	July 1999
	4-10	July 1999
	4-11	July 1999
5	5-1	*Feb. 2000*
	5-2	*Feb. 2000*
	5-3	July 1999
6	6-1	July 1999
	6-2	July 1999
	6-3	July 1999
8	8-1	July 1999
	8-2	July 1999
9	9-1	July 1999
10	10-1	July 1999
	10-2	July 1999
	10-3	July 1999
11	11-1	July 1999
	11-2	July 1999
12	12-1	July 1999
13	13-1	July 1999
	13-2	July 1999
	13-3	July 1999
14	14-1	July 1999
	14-1a	July 1999
	14-2	July 1999
	14-3	July 1999
	14-4	July 1999
	14-5	July 1999
	14-6	July 1999
	14-7	July 1999
	14-8	July 1999
	14-9	July 1999
	14-10	July 1999
	14-11	July 1999
	14-12	July 1999
15	15-1	July 1999

Erstellt:	Geprüft:	Complies:
28.02.00		

Aileron System (Wings)

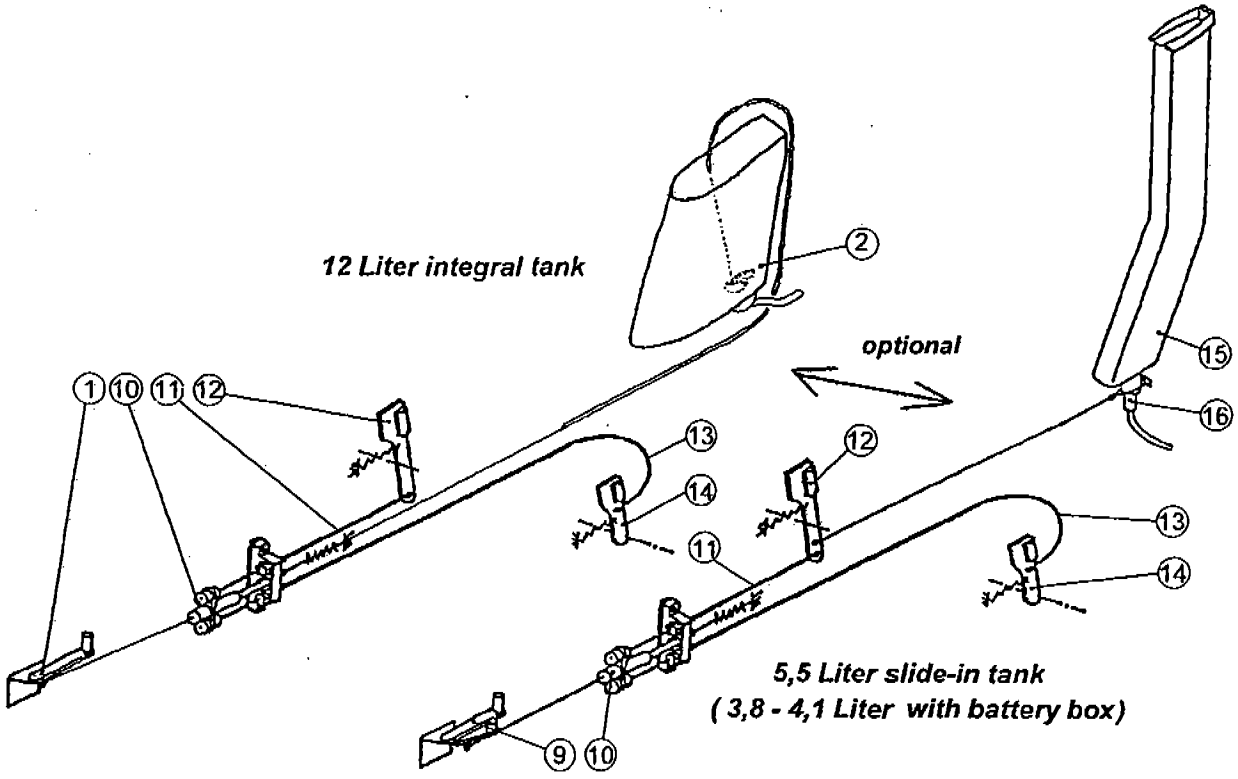
No.	Denomination	Drawing
1	Root rib bracket	4F3-76
2	Root rib aileron drive	3F3-78
3	Right aileron pushrod	4F3-135
	Left aileron pushrod	4F3-139
4	Aileron drive lever	1F3-133
5	Wing aileron drive bracket	4F3-134
6	Aileron drive rod	4F3-137
7	Drive bracket at aileron	4Q1-40
8	Aileron stop	4F32-136



Erstellt: 28.02.00	Geprüft:	Complies:

Fuselage Water Ballast System

No.	Denomination	Drawing
1	Cockpit lever (Integral tank)	4R12-141
2	Tail tank valve (Integral tank)	1BR-213
9	Cockpit lever (Slide-in tank)	1BR-188a
10	Water ballast drive distributor	1BR-188a
11	Right side bowden cable	4R12-129
12	Right side fuselage lever	4R12-113
13	Left side bowden cable	4R12-130
14	Left side fuselage lever	4R12-114
15	Slide-in tail tank	3GR-122
16	Slide-in tail tank valve	4BR-121

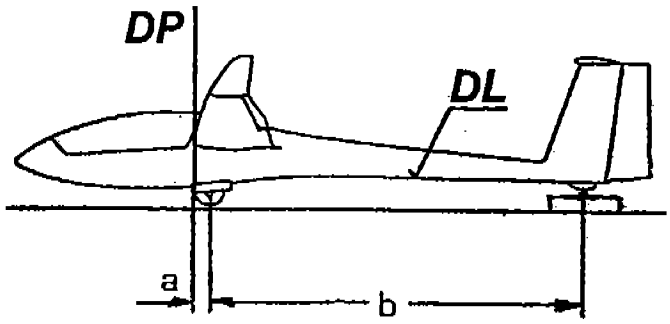


Erstellt:	Geprüft:	Complies:

Weight and Balance

Datum Line <DL>: Under side of fuselage boom placed horizontal
Datum Point <DP>: Leading edge of wing at root

1. **Determine total weight** (Empty or take-off weight) for both wing span versions, in most cases by weighing all parts and adding together.
2. **Assemble the sailplane** in the 15 m version according to instructions in Flight Manual pages 4-1/2. For in-flight C.G. position, the pilot must be seated in the sailplane.
3. **Raise tail on weighing machine** until datum line is level using wooden blocks or adjustable rack. Check with levelling gauge.
4. **Measure distance <b>** from tail support to centre of landing gear axis.
5. Using plumb lead, determine points on floor perpendicular to left and right datum points, and points on floor perpendicular to centre of landing gear axis. **Measure distance <a>** from wheel axis to datum point.



6. Determine tail weight and deduct weight of auxiliary support used under 3) to get **net tail weight**.
7. Calculate C.G. position for full vertical tail fin tank:

$$Xcg = \frac{(\text{net tail weight} + \text{tail fin water weight}) * b}{\text{total weight} + \text{tail fin water weight}} + a$$

Calculate C.G. position for empty vertical tail fin tank:

$$Xcg = \frac{\text{net tail weight} * b}{\text{total weight}} + a$$

8. **When a battery is fitted in the vertical tail fin**, weighing must be done in this configuration. Weigh tail fin battery separately. (Maximum 2.6 kg <5.7 lbs>).
9. Calculate loading limits according to page 2-2.

Form for **Weighing Report** for copying see Maintenance Manual, page 14-4.

Erstellt: 28.02.00	Geprüft:	Complies:

Calculation of Maximum Weight of Non-Lifting Parts

Maximum weight of non-lifting parts of 255 kg <562 lbs> must be reduced in relation to empty weight at 15 m span and empty weight C.G. position **Xs** according to table below (For lbs/inch values see following page).

Example: For empty weight C.G. position of *665* mm <26.181 in> and empty weight of *255* kg <562 lbs> the permissible weight of non-lifting parts is *239* kg <527 lbs>.

Empty Weight G <kg>	Empty Weight C.G. position Xs <mm>											
	from 560 to 579	from 580 to 599	from 600 to 619	from 620 to 639	from 640 to 659	from 660 to 679	from 680 to 699	from 700 to 719	from 720 to 739	from 740 to 759	from 760 to 779	From 780 To 799
255 -256	239	239	239	239	239	239	241	242	243	244	245	247
256 -257	239	239	239	239	239	239	241	242	243	244	246	247
257 -258	239	239	239	239	239	240	241	242	243	244	246	247
258 -259	239	239	239	239	239	240	241	242	243	245	246	247
259 -260	239	239	239	239	239	240	241	242	243	245	246	247
260 -261	239	239	239	239	239	240	241	242	244	245	246	247
261 -262	239	239	239	239	239	240	241	242	244	245	246	247
262 -263	239	239	239	239	239	240	241	243	244	245	246	248
263 -264	239	239	239	239	239	240	241	243	244	245	246	248
264 -265	239	239	239	239	239	240	242	243	244	245	247	248
265 -266	239	239	239	239	239	240	242	243	244	245	247	248
266 -267	239	239	239	239	239	241	242	243	244	246	247	248
267 -268	239	239	239	239	239	241	242	243	244	246	247	248
268 -269	239	239	239	239	239	241	242	243	245	246	247	248
269 -270	239	239	239	239	240	241	242	243	245	246	247	249
270 -271	239	239	239	239	240	241	242	244	245	246	247	249
271 -272	239	239	239	239	240	241	242	244	245	246	248	249
272 -273	239	239	239	239	240	241	242	244	245	246	248	249
273 -274	239	239	239	239	240	241	243	244	245	246	248	249
274 -275	239	239	239	239	240	241	243	244	245	247	248	249
275 -276	239	239	239	239	240	242	243	244	245	247	248	249
276 -277	239	239	239	239	240	242	243	244	246	247	248	249
277 -278	239	239	239	239	240	242	243	244	246	247	248	250
278 -279	239	239	239	239	241	242	243	244	246	247	248	250
279 -280	239	239	239	239	241	242	243	245	246	247	249	250
280 -281	239	239	239	239	241	242	243	245	246	247	249	250
281 -282	239	239	239	239	241	242	243	245	246	248	249	250
282 -283	239	239	239	240	241	242	244	245	246	248	249	250
283 -284	239	239	239	240	241	242	244	245	246	248	249	250
284 -285	239	239	239	240	241	242	244	245	247	248	249	251
285 -286	239	239	239	240	241	243	244	245	247	248	249	251
286 -287	239	239	239	240	241	243	244	245	247	248	250	251
287 -288	239	239	239	240	241	243	244	246	247	248	250	251
288 -289	239	239	239	240	242	243	244	246	247	248	250	251
289 -290	239	239	239	240	242	243	244	246	247	249	250	251
290 -291	239	239	239	240	242	243	245	246	247	249	250	251
291 -292	239	239	239	240	242	243	245	246	247	249	250	252
292 -293	239	239	239	241	242	243	245	246	248	249	250	252
293 -294	239	239	239	241	242	243	245	246	248	249	250	252
294 -295	239	239	239	241	242	244	245	246	248	249	251	252

Erstellt: 28.02.00	Geprüft:	Complies:

Calculation of Maximum Weight of Non-Lifting Parts

Maximum weight of non-lifting parts of 562 lbs <255 kg> must be reduced in relation to empty weight and empty weight C.G. position Xs according to table below (For kg/mm values see preceding page).

Example: For empty weight C.G. position of *26.181* in <665 mm> and empty weight of *562* lbs <255 kg> the permissible weight of non-lifting parts is *527* lbs <239 kg>.

Empty Weight G <lbs>	Empty Weight C.G. position Xs <in>											
	from 22.047 to 22.795	from 22.835 to 23.583	from 23.622 to 24.370	from 24.409 to 25.157	from 25.197 to 25.945	From 25.984 to 26.732	from 26.772 to 27.520	from 27.559 to 28.307	from 28.346 to 29.094	from 29.134 to 29.882	From 29.921 to 30.669	from 30.709 to 31.457
562-564	527	527	527	527	527	527	531	534	536	538	540	545
564-567	527	527	527	527	527	527	531	534	536	538	542	545
567-569	527	527	527	527	527	529	531	534	536	538	542	545
569-571	527	527	527	527	527	529	531	534	536	540	542	545
571-573	527	527	527	527	527	529	531	534	536	540	542	545
573-575	527	527	527	527	527	529	531	534	538	540	542	545
575-578	527	527	527	527	527	529	531	534	538	540	542	545
578-580	527	527	527	527	527	529	531	536	538	540	542	547
580-582	527	527	527	527	527	529	531	536	538	540	542	547
582-584	527	527	527	527	527	529	534	536	538	540	544	547
584-586	527	527	527	527	527	529	534	536	538	540	544	547
586-589	527	527	527	527	527	531	534	536	538	542	544	547
589-591	527	527	527	527	527	531	534	536	538	542	544	547
591-593	527	527	527	527	529	531	534	536	540	542	544	547
593-595	527	527	527	527	529	531	534	536	540	542	544	549
595-597	527	527	527	527	529	531	534	538	540	542	544	549
597-600	527	527	527	527	529	531	534	538	540	542	547	549
600-602	527	527	527	527	529	531	534	538	540	542	547	549
602-604	527	527	527	527	529	531	536	538	540	542	547	549
604-606	527	527	527	527	529	531	536	538	540	544	547	549
606-608	527	527	527	527	529	534	536	538	540	544	547	549
608-611	527	527	527	527	529	534	536	538	542	544	547	549
611-613	527	527	527	527	529	534	536	538	542	544	547	551
613-615	527	527	527	527	531	534	536	538	542	544	547	551
615-617	527	527	527	527	531	534	536	540	542	544	549	551
617-619	527	527	527	527	531	534	536	540	542	544	549	551
619-622	527	527	527	527	531	534	536	540	542	547	549	551
622-624	527	527	527	529	531	534	538	540	542	547	549	551
624-626	527	527	527	529	531	534	538	540	542	547	549	551
626-628	527	527	527	529	531	534	538	540	544	547	549	553
628-631	527	527	527	529	531	536	538	540	544	547	549	553
631-633	527	527	527	529	531	536	538	540	544	547	551	553
633-635	527	527	527	529	531	536	538	542	544	547	551	553
635-637	527	527	527	529	531	536	538	542	544	547	551	553
637-639	527	527	527	529	534	536	538	542	544	549	551	553
639-642	527	527	527	529	534	536	540	542	544	549	551	553
642-644	527	527	527	529	534	536	540	542	544	549	551	556
644-646	527	527	527	531	534	536	549	542	547	549	551	556
646-648	527	527	527	531	534	536	540	542	547	549	551	556
648-650	527	527	527	531	534	538	540	542	547	549	553	556

Erstellt: 28.02.00 Geuck	Geprüft: Wadas	Complies:

Airworthiness Limitations Section

This Airworthiness Limitations Section is LBA-approved.
LBA-approved:

Log of Revisions for Airworthiness Limitations Section

No.	Pages affected	Description	LBA-Approval Signature / Date
1	5-1, 5-1	C.G. and nose hook limitation clarified.	11. 07. 00

Erstellt:	Geprüft:	Genehmigt:

Airworthiness Limitations

1. C.G. hook	TOST or TOST or TOST	Europa G 73: Europa G 72 Europa G 88	**48 months or 2000 take-offs,** whichever comes first)*
2. Nose hook	TOST or TOST	E 75 or E 72: E 85	**48 months or 2000 take-offs,** whichever comes first)*
3. Safety harness	Autoflug FAG-12D FAG-12H	lap belt with multiple point buckle MS-17/B shoulder strap	**Webbing life limit 12 years from manufacturing date)***
Safety harness	Gadringer Bagu 5402 Schugu 2700	lap belt with multiple point buckle shoulder strap	**Webbing life limit 12 years from manufacturing date)***
Safety harness	Schroth	Type 4-01-1A52xx with multiple point buckle Lap belt and shoulder strap (Not entered digits xx nominate webbing colour: Standard colours: 06 dark blue; 91 blue, 66 red, 14 grey)	**Webbing life limit 12 years from manufacturing date)***
4. Sailplane structural life limit::		**3000 hours** total flying time The life limit may be increased according to the procedure outlined on page 5-3 stepwise up to **12000** hours total flying time.	

)* See also Maintenance- and Operating Instructions of manufacturers.

Note: Repair damage prior to next flight.

When in doubt, weather a "small repair" or a "major repair" is necessary, contact the manufacturer.

"Major repairs" must be accomplished in accordance with Rolladen-Schneider repair methods at national authorities-certified repair stations rated for composite aircraft structure work, at FAA Certificated Repair Stations, or by other qualified persons authorised to perform maintenance on composite structures.

Certain "major repairs" may only performed by the manufacturer due to necessary jigs. This has to be checked with the manufacturer for the case in question.

Erstellt: 28.02.00	Geprüft:	Complies: