



TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.241

for
Glasflügel Sailplanes

Type Certificate Holder
Glasfaser Flugzeug-Service GmbH

Hofener Weg
72582 Grabenstetten
Germany

For models: BS 1
 H 301 „Libelle“
 H 301 B
 H 301 serial No. 1
 Standard Libelle
 Standard Libelle 201 B
 Standard Libelle 203
 Kestrel
 Glasflügel 604
 Club Libelle 205
 Hornet
 Hornet C
 Mosquito
 Mosquito B
 Glasflügel 304



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SECTION A: BS 1

A.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	BS 1
2. Airworthiness Category	Sailplane Utility "U"
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	25 June 1962
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	04 February 1999
7. EASA Type Certification Date	10 July 2008

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter 3-238/Tgb-Nr. 1892/62, dated June 28 th 1962
2. Airworthiness Requirements	<ul style="list-style-type: none">– Design Specification (BVS, book 1 to 3)– Airworthiness Requirements for Sailplanes (LFS), issue 1966, chapter "Flight"– Preliminary Airworthiness Requirements for Towing issue October 1955– Preliminary Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue 1965
3. Special Conditions	None
4. Exemptions	LFS § 13(2) LFS § 18(2) LFS § 34(1)
5. Equivalent Safety Findings	None
6. Environmental Protection	None



A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

List of Drawings BS1
Amendment to the Definition
of the Type BS, LBA-approved
January 04th 1999

2. Description

Single Seater, shoulder
winged sailplane, all
composite construction, flaps,
Schempp-Hirth type air-brake
on the upper and lower wing
surface, braking parachute.
Springmounted retractable
landing gear, all moving T-tail.

3. Equipment

Min. Equipment:

- 1 Air speed indicator
(up to 210 km/h)
- 1 Altimeter
- 1 4-Point safety
harness (symmetrical)
- 1 Parachute or back
cushion per person
(thickness approx. 10
cm / 3.94 in. when
compressed)

Additional Equipment refer to
Flight and Maintenance
Manual

4. Dimensions

Wing Span 18 m

5. Launching Hooks

- Special Hook "SH 72", LBA
Datasheet No. 60.230/3
- Nose tow hook "E72", LBA
Datasheet No. 60.230/1
- Nose tow hook "E75", LBA
Datasheet No. 60.230/1
- Nose tow hook "E85", LBA
Datasheet No. 60.230/1

6. Weak links

For winch launching
For aero towing

max. 900 daN
max. 600 daN

7. Air Speeds

Manoeuvring Speed v_A
Never Exceed Speed v_{NE}
Maximum permitted speeds
With flaps at -4, 0, +2
With flaps at +5
With extendet Speedbreaks

200 km/h
200 km/h
200 km/h
150 km/h
200 km/h



Winch launching v_w	130 km/h
Aero Towing v_T	170 km/h
8. Approved Operations Capability	Approved for VFR-flying in daytime
9. Maximum Masses	
Max. Mass	460 kg
Max. Mass of Non-Lifting Parts	270 kg
10. Centre of Gravity Range	
Forward Limit	336 mm aft of datum point
Rearward Limit	420 mm aft of datum point
11. Datum	Wing leading edge at wing root rip
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 1000:88 on top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

A.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual BS 1, issue June 1998, LBA approved

2. Maintenance Manual

- Maintenance manual BS 1, issue June 1998
- Manuals for the Tost Releases, latest approved version
- Operating Instructions for the braking parachute for sailplanes, issue November 1968

A.V. Notes

1. Manufacturing is confined to industrial production. The certification is limited to S/N 6, 10, 11, 13, 14, and 20
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white colour surface
3. Before final registration compliance has to be shown with the “Amendment to the type definition of the BS1” during a full scale inspection.
4. Full inspection according to A.V.3 as well as major repair of the type are only allowed to:
 Glasfaser Flugzeug-Service GmbH
 Hofener Weg
 72582 Grabenstetten
 Germany
5. In addition to A.IV.2.: Service Bulletin 1-2005 of Company Glasfaser-Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.



SECTION B: H 301 "LIBELLE"

B.I. General

1. Type/Model	
1.1 Type	Glasflügel Sailplanes
1.2 Model	H301 "Libelle"
2. Airworthiness Category	Sailplane – Utility "U"
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	23 September 1963
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	19. August 1965
7. EASA Type Certification Date	10 July 2008

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter 3 – 251/Tgb.-Nr- 3676/63, dated October 01 st 1963
2. Airworthiness Requirements	<ul style="list-style-type: none">– Design Specification (BVS, book 1 to 3) in combination with– British Civil Airworthiness Requirements (BCAR) Section E "Gliders", Subsection 2 "Flight"– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



B.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Drawings, list of drawings, manufacturing instructions for H 301 DVL/PfL-checked, August 03rd 1965

2. Description

Single seater, mid-wing sailplane, all composite construction, flaps, air brake. Normal tail unit, springmounted retractable landing gear

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 250 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion (thickness approx. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15 m

5. Launching Hooks:

- 1) Special hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional

Tow hook 4 see B.V.6

6. Weak links

For winch launching

max. 670 daN

For Aero towing

max. 450 daN

7. Air Speeds

Manoeuvring Speed v_A

175 km/h

Never Exceed Speed v_{NE}

200 km/h

Maximum permitted speeds

With flaps at -4, 0,

200 km/h

With flaps at +4

140 km/h



With flaps at +3	155 km/h
With flaps at +2	170 km/h
With flaps at +1	185 km/h
In rough air	175 km/h
Winch launching v_w	120 km/h
Aero Towing v_T	140 km/h
8. Approved Operations Capability	Approved for VFR-flying in daytime
9. Maximum Masses	
Max. Mass	300kg
Max. Mass of Non-Lifting Part	200kg
10. Centre of Gravity Range	
Forward Limit	215 mm aft of datum point
Rearward Limit	354 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centerline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:7 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

B.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual H301 “Libelle”, issue May 1965, DVL/PfL-checked
- Replacement pages to the Glider Flight Manual H301 “Libelle” initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual H301 “Libelle”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version
- Operating Instructions for the braking parachute for sailplanes, issue November 1968 (if installed)



B.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. The Certification belongs to S/N 2 up to 41 with the requirement that the modification for the fuselage No.8 has been performed.
5. The use of a braking parachute for sailplanes is allowed, if modification No. 14 of company Glasflügel, Ing. Eugen Hänle, DVL/PfL.checked has been performed. This modification can only be performed at the manufacturer.
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 35 of company Streifeneder, LBA-approved.
7. In addition to B.IV.2.2. : Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH ; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
8. The increase of MTOM of max. 5% is possible according to the measures and procedures described in SB 301-42 of Company Glasfaser Flugzeug-Service GmbH, H. Streifeneder.



SECTION C: H 301 B

C.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	H301 B
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	15 August 1968
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	16 September 1968
7. EASA Type Certification Date	10 July 2008

C.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 251/68, dated August 19 th 1968
2. Airworthiness Requirements	<ul style="list-style-type: none">– Design Specification (BVS, book 1 to 3) in combination with– British Civil Airworthiness Requirements (BCAR) Section E “Gliders”, Subsection 2 “Flight”– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



C.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

- Drawings, list of drawings, manufacturing instructions for H 301 DVL/PfL-checked, August 03rd 1965
- List of modifications incooperated into the variant H301 B (note, dated September 17th 1968)

2. Description

Single seater, mid-wing sailplane, all composite construction, flaps, air brake, braking parachute in the rudder. Normal tail unit, spring mounted retractable landing gear.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 265 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15 m

5. Launching Hooks

- 1) Special hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see C.V.5



6. Weak links

For winch launching max.	670 daN
For aero towing max.	450 daN

7. Air Speeds

Manoeuvring Speed v_A	150 km/h
Never Exceed Speed v_{NE}	200 km/h
Maximum permitted speeds	
With flaps at -4, 0,	200 km/h
With flaps at +4	140 km/h
With flaps at +3	155 km/h
With flaps at +2	170 km/h
With flaps at +1	185 km/h
Winch launching v_W	120 km/h
Aero Towing v_T	140 km/h

8. Approved Operations Capability	Approved for VFR-flying in daytime
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9. Maximum Masses

Max. Mass	300kg
Max. Mass of Non-Lifting Part	200kg

10. Centre of Gravity Range

Forward Limit	215 mm aft of datum point
Rearward Limit	354 mm aft of datum point

11. Datum	Wing leading edge $y=425$ mm from the centerline
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12. Control surface deflections	Refer to Maintenance Manual
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13. Levelling Means	Wedge 100:7 on rear top fuselage to be horizontal
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14. Minimum Flight Crew	1
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15. Maximum Passenger Seating Capacity	0
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C.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual H301 “Libelle”, issue May 1965, DVL/PfL-checked, with page 11a
- Replacement pages to the Glider Flight Manual H301 “Libelle” initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual H301 “Libelle” with data sheet for modified control surface deflections.
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version
- Operating Instructions for the braking parachute for sailplanes, issue November 1968 (if installed)



C.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. The Certification is valid beginning with S/N 42
5. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 35 of company Streifeneder, LBA-approved.
6. In Addition to C.IV.2.2 : Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH ; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M
7. The increase of MTOW of max. 5% is possible according to the measures and procedures described in SB 301-42 of Company Glasfaser Flugzeug-Service GmbH, H. Streifeneder.



SECTION D: H 301 SERIAL NO.1

D.I. General

1. Type/Model/Variant

1.1 Type

1.2 Model

2. Airworthiness Category

3. Manufacturer

4. Type Certification Application Date

5. State of Design Authority

6. State of Design Authority Type Certificate Date

7. EASA Type Certification Date

Glasflügel Sailplanes

H301 serial No. 1

Sailplane – Utility “U”

Fa. Glasflügel

Ing. Eugen Hänle

7311 Schlattstall

Germany

05 April 1967

Germany

07 April 1967

10 July 2008

D.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements

Defined by LBA letter I 30 –
251/67, dated April 07th 1967

2. Airworthiness Requirements

- Design Specification (BVS, book 1 to 3) in combination with
- British Civil Airworthiness Requirements (BCAR) Section E “Gliders”, Subsection 2 “Flight”
- Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics issue 1965

3. Special Conditions

None

4. Exemptions

None

5. Equivalent Safety Findings

None

6. Environmental Protection

None

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Collection of blue prints of the Type, DVL/PfL-checked, dated March 22nd 1967



2. Description

Single seater, mid-wing sailplane, all composite construction, flaps, air brake, braking parachute in the rudder. Normal tail unit, spring mounted retractable landing gear.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 250 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

Wing Span 15 m

4. Dimensions

5. Launching Hooks

- 1) Special hook "SH72", LBA Datasheet N. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see D.V.6

6. Weak links:

For aero towing

max. 450 daN

7. Air Speeds

Manoeuvring Speed v_A	175 km/h
Never Exceed Speed v_{NE}	200 km/h
Maximum permitted speeds	
With flaps at 0,-3	200 km/h
With flaps at +4	140 km/h
With flaps at +3	155 km/h
With flaps at +2	170 km/h
With flaps at +1	185 km/h
In rough air v_{RA}	175 km/h
Aero Towing v_T	140 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime



9. Maximum Masses

Max. Mass	300kg
Max. Mass of Non-Lifting Part	200kg

10. Centre of Gravity Range

Forward Limit	255 mm aft of datum point
Rearward Limit	395 mm aft of datum point

The above mentioned data belongs to the c.g. during flight.

11. Datum	Wing leading edge $y=425$ mm from the centerline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	wing chord at $y = 425$ mm horizontal or wedge 100:5,0 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

D.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual H301 S/N 1, issue March 1967, DVL/PfL-checked, with page 11a
- Replacement pages to the Glider Flight Manual H301 initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual H301, Werk-Nr. 1
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version
- Operating Instructions for the braking parachute for sailplanes, issue November 1968

D.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. The Certification is limited to S/N 1
4. Qualified for cloud flying according to the Flight Manual
5. Winch launching is not allowed
6. The installation of a nose tow hook "E85" is allowed according to the Service Bulletin No. 35 of company Streifeneder, LBA-approved.
7. In addition to D.IV.2.2. : Service Bulletin No.35 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M



SECTION E: STANDARD LIBELLE

E.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Standard Libelle
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	16 August 1967
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	22 October 1968
7. EASA Type Certification Date	10 July 2008

E.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 251/67, dated August 25 th 1967
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), issue 27th 1989 (Change 4 of the English original Issue), with JAR 22.375 (Winglets) from amendment 22/90/1 dated February 12th 1991 (see E.V.7)– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



E.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Drawings, list of drawings, marked as for H 201, LBA-Approved, October 18th 1968

2. Description

Single seater, mid-wing sailplane, all composite construction, air brake, wing fixed profile, optional conventional wing tip or winglets (see E.V.7). Normal tail unit, fixed or retractable landing gear.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 250 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15 m

5. Launching Hooks

- 1) Special hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see E.V.6

6. Weak links

For winch launching
For aero towing

max. 500 daN
max. 500 daN



7. Air Speeds

Manoeuvring Speed v_A	150 km/h
Never Exceed Speed v_{NE}	220 km/h
Maximum permitted speeds	
In rough air v_{RA}	150 km/h
In winch-launch v_W	120 km/h
in aero-tow v_T	150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.

9. Maximum Masses

Max. Mass	290kg
Max. Mass of Non-Lifting Part	200kg

10. Centre of Gravity Range

Forward Limit	244 mm aft of datum point
Rearward Limit	348 mm aft of datum point

11. Datum

Wing leading edge $y=425$ mm from the centreline

12. Control surface deflections

Refer to Maintenance Manual

13. Levelling Means

Wedge 100:7 on rear top fuselage to be horizontal

14. Minimum Flight Crew

1

15. Maximum Passenger Seating Capacity

0



E.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Standard Libelle”, issue 1968, LBA-approved
- Replacement pages to the Glider Flight Manual “Standard Libelle” initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual “Standard Libelle”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

E.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Subsequent conversion into the variant « Standard Libelle 201 B » (without water ballast) is allowed, if the measures described in Service Bulletin No. 201-11 of Company Glasflügel are performed.
5. Subsequent conversion into the variant „Standard Libelle 201 B“ (with water ballast) is allowed, if the measures described in Service Bulletin No. 201-10 of Company Glasflügel are performed.
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 35 of company Streifeneder, LBA-approved.
7. According to Service Bulletin No. 201-30 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, LBA-approved, the use of winglets is allowed.
8. In addition to E.IV.2.2. : Service Bulletin No.35 of Company Glasfaser Flugzeug-Service GmbH ;Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M
9. According to Service Bulletin No. 201-42 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, EASA-approved, the use of the modified winglets is allowed.



SECTION F: STANDARD LIBELLE 201 B

F.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Standard Libelle 201 B
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	13 September 1971
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	02 June 1972
7. EASA Type Certification Date	10 July 2008

F.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 251/71, dated September 21 st 1971
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), issue 27th 1989 (Change 4 of the English original Issue), with JAR 22.375 (Winglets) from amendment 22/90/1 dated February 12th 1991 (see E.V.7)– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



F.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Drawings and list of drawings,
LBA-Approved May 30th 1972

2. Description

Single seater, mid-wing
sailplane, all composite
construction, air brake, wing
with fixed profile, optional
conventional wing tip or
winglets (see F.V.8). Normal
tail unit, fixed landing
gear with break, or retractable
landing gear with break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (50
up to 265 km/h)
- 1 Altimeter
- 1 4-Point safety harness
(symmetrical)
- 1 Parachute or back
cushion per person
(thickness approx..
10cm/3.94 in when
compressed)

Additional Equipment refer to
Flight and Maintenance
Manual

4. Dimensions

Wing Span 15 m
Optional (see F.V.6) 17m

5. Launching Hooks

- 1) Special Hook "SH72", LBA
Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA
Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA
Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA
Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see F.V.7

6. Weak links:

For winch launching
For aero towing

max. 500 daN
max. 500 daN



7. Air Speeds

Manoeuvring Speed v_A	150 km/h
Never Exceed Speed v_{NE}	250 km/h
Maximum permitted speeds	
In rough air v_{RA}	150 km/h
In winch-launch v_W	120 km/h
in aero-tow v_T	150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.

9. Maximum Masses

Max. Mass	350kg
Max. Mass of Non-Lifting Part	210kg

10. Centre of Gravity Range

Forward Limit	244 mm aft of datum point
Rearward Limit	348 mm aft of datum point

11. Datum

Wing leading edge $y=425$ mm from the centreline

12. Control surface deflections

Refer to Maintenance Manual

13. Levelling Means

Wedge 100:7 on rear top fuselage to be horizontal

14. Minimum Flight Crew

1

15. Maximum Passenger Seating Capacity

0



F.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Standard Libelle 201 B”, issue 1968, LBA-approved, with supplement to the Glider Flight Manual “Standard Libelle 201 B” issue April 1972, LBA-approved.
- Replacement pages to the Glider Flight Manual “Standard Libelle 201 B” initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual “Standard Libelle 201 B”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

F.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Subsequent installation of water ballast tanks is allowed, if the measures described in Service Bulletin No.201-12 of Company Glasflügel are performed.
5. Subsequent installation of landing flaps according to the Service Bulletin No. 201 R-1 of Mr. J. Renner, Am Gerstenfeld 2, 5561 Greimerath is allowed.
6. The optional modification to a wing span of 17,00 m according to the Service Bulletin No. 201 R-2 of Mr. J. Renner, Am Gerstenfeld 2, 5561 Greimrath is allowed.
7. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 28 of company Streifeneder, LBA-approved.
8. According to Service Bulletin No. 201-30 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, LBA-approved, the use of winglets is allowed.
9. In addition to F.IV.2.2.: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
10. According to Service Bulletin No. 201-42 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, EASA-approved, the use of the modified winglets is allowed.



SECTION G: STANDARD LIBELLE 203

G.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Standard Libelle 203
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	02 December 1971
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	12 February 1976
7. EASA Type Certification Date	10 July 2008

G.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 251/71, dated December 23 rd 1971
2. Airworthiness Requirements	– Airworthiness Requirements for Sailplanes – (LFS), issue 1966 – Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



G.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

Drawings and list of drawings,
LBA-Approved May 30th 1972

2. Description

Single seater, mid-wing
sailplane, all composite
construction, air brake, wing
with fixed
profile, conventional wing tip,
water ballast in the wing, T-
tail, retractable landing gear
with break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (50
up to 265 km/h)
- 1 Altimeter
- 1 4-Point safety harness
(symmetrical)
- 1 Parachute or back
cushion per person
(thickness approx..
10cm/3.94 in when
compressed)

Additional Equipment refer to
Flight and Maintenance
Manual

4. Dimensions

Wing Span 15 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA
Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA
Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA
Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA
Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional

Tow hook 4 see G.V.5

6. Weak links:

For winch launching max. 500 daN
For aero towing max. 500 daN

7. Air Speeds

Manoeuvring Speed v_A	150 km/h
Never Exceed Speed v_{NE}	255 km/h
Maximum permitted speeds	
In rough air v_{RA}	150 km/h
In winch-launch v_W	120 km/h
in aero-tow v_T	150 km/h



8. Approved Operations Capability	Approved for VFR-flying in daytime.
9. Maximum Masses	
Max. Mass	380kg
Max. Mass of Non-Lifting Part	210kg
10. Centre of Gravity Range	
Forward Limit	244 mm aft of datum point
Rearward Limit	348 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100 : 5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

G.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Standard Libelle 203”, issue 1974, LBA-approved.
- Replacement pages to the Glider Flight Manual “Standard Libelle 203” initiated by Service Bulletins
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual “Standard Libelle 203”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

G.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. The certification is limited to the S/N 1 and 2 and is linked to the accomplishment of Service Bulletin No. 203/1
5. The installation of a nose tow hoko „E85“ is allowed according to the Service Bulletin No. 28 of company Streifeneder, LBA-approved.
6. In addition to G.IV.2.2.: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.



SECTION H: KESTREL

H.I. General

1. Type/ Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Kestrel
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4 Type Certification Application Date	05 April 1968
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	05 February 1970
7. EASA Type Certification Date	10 July 2008

H.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 276/68, dated February 11 th 1968
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

H.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings for Type 401, LBA-Approved February 4 th 1970
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2. Description

Single seater, mid-wing sailplane, all composite glasfibre construction, flaps, air brake, braking parachute, conventional wing tip, water ballast in the wing, T-tail, retractable landing gear with break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 17,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

6. Weak links:

Note:

Tow hook 2,3,4 optional

Tow hook 4 see H.V.5

For winch launching max. 600 daN

For aero towing max. 500 daN

7. Air Speeds

Manoeuvring Speed v_A	150 km/h
Never Exceed Speed v_{NE}	250 km/h
Maximum permitted speeds	
With flaps at -1, .2	250 km/h
With flaps at +1 , 0	200 km/h
With flaps at +2	150 km/h
With flaps at L	120 km/h
In rough air v_{RA}	150 km/h
In winch-launch v_W	130 km/h
in aero-tow v_T	150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.

9. Maximum Masses

Max. Mass	400kg
Max. Mass of Non-Lifting Part	239kg



10. Centre of Gravity Range	
Forward Limit	287 mm aft of datum point
Rearward Limit	379 mm aft of datum point
11. Datum	Wing leading edge $y=500$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:4,4 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

H.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Kestrel”, issue February 1970, LBA-approved.
- Limitation placard
- Trim sheet

2. Maintenance Manual

- Service Manual “Kestrel”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

H.V. Notes

1. Manufacturing is confined to industrial production.
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. For S/N which are modified according to Service Bulletin 401-14, differing from H.III.9 the max Mass of Non-Lifting Parts is 250 kg
5. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 22 of company Streifeneder, LBA-approved.
6. In addition to H.IV.2.2: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.



SECTION I: GLASFLÜGEL 604

I.I. General

1. Type/ Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Glasflügel 604
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Fa. Glasflügel Ing. Eugen Hänle 7311 Schlattstall Germany
4. Type Certification Application Date	17 March 1970
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	06 September 1982
7. EASA Type Certification Date	10 July 2008

I.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 281/70, dated March 14 th 1970
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

I.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings, LBA-Approved September 1982
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2. Description

Single seater, mid-wing sailplane, all composite glasfibre construction, flaps, air brake only on the upper wing surface, braking parachute, conventional wing tips, water ballast in the wings, T-tail, retractable landing gear with break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 22,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional

Tow hook 4 see I.V.6

6. Weak links:

For winch launching

max. 850 daN

For aero towing

max. 500 daN

7. Air Speeds

Manoeuvring Speed v_A

150 km/h

Never Exceed Speed v_{NE}

250 km/h

Maximum permitted speeds

With flaps at -1, -2

250 km/h

With flaps at +1, 0

200 km/h

With flaps at +2

150 km/h

With flaps at L

120 km/h

In rough air v_{RA}

150 km/h

Braking parachute ejection up to

250 km/h

In winch-launch v_W

130 km/h

in aero-tow v_T

150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.



9. Maximum Masses	
Max. Mass	650kg
Max. Mass of Non-Lifting Part	300kg
10. Centre of Gravity Range	
Forward Limit	378 mm aft of datum point
Rearward Limit	455 mm aft of datum point
11. Datum	Wing leading edge $y=500$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:4,4 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

I.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “604”, issue November 1973, LBA-approved.
- Replacement pages to the Glider Flight Manual “604” initiated by Service Bulletins.
- Limitation placard.
- Trim sheet.

2. Maintenance Manual

- Service Manual “Glasflügel 604”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

I.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Manufacturing is limited to S/N 1 up to 10
5. The measures according to Modification Bulletin dated February 04th 1974 of Company Glasflügel have to be performed
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 4 of company Streifeneder, LBA-approved.
7. In addition to I.IV.2.2: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.



SECTION J: CLUB LIBELLE 205

J.I. General

1. Type/Model/ Variant

1.1 Type

1.2 Model

2. Airworthiness Category

3. Manufacturer

Glasflügel Sailplanes

Club Libelle 205

Sailplane – Utility “U”

Fa. Glasflügel

Ing. Eugen Hänle

7311 Schlattstall

Glasflügel Segelflugzeugbau

Hollighaus & Hillenbrand

GmbH & Co. KG

7318 Lenningen/Württ. 1

4. Type Certification Application Date

22 September 1972

5. State of Design Authority

Germany

6. State of Design Authority Type Certificate Date

28 October 1974

7. EASA Type Certification Date

10 July 2008

J.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements

Defined by LBA letter I 30 –
251/72, dated September 05th
1972

2. Airworthiness Requirements

- Airworthiness Requirements for Sailplanes – (LFS), issue 1966
- Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), issue 27th June 1989 (Change 4 of the English original Issue), with JAR 22.375 (Winglets) from amendment 22/90/1 dated 12th February 1991 (see J.V.6)
- Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965

3. Special Conditions

None



4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

J.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings, LBA-Approved, October 1974
2. Description	Single seater, high wing sailplane, all composite glasfibre construction, air brake at the trailing edge, optional conventional wing tips or winglets (see J.V.6), T-tail, spring mounted landing gear with break.
3. Equipment	Min. Equipment: <ul style="list-style-type: none">– 1 Air speed indicator (up to 250 km/h)– 1 Altimeter– 1 4-Point harness (symmetrical)– 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed) Additional Equipment refer to Flight and Maintenance Manual
4. Dimensions	Wing Span 15,00 m
5. Launching Hooks	<ol style="list-style-type: none">1) Special Hook "SH72", LBA Datasheet No. 60.230/32) Nose tow hook "E72", LBA Datasheet No. 60.230/13) Nose tow hook "E75", LBA Datasheet No. 60.230/14) Nose tow hook "E85", LBA Datasheet No. 60.230/1
6. Weak links:	Note: Tow hook 2,3,4 optional Tow hook 4 see J.V.5 For winch launching max. 500 daN For aero towing max. 500 daN
7. Air Speeds	Manoeuvring Speed v_A 150 km/h Never Exceed Speed v_{NE} 200 km/h Maximum permitted speeds In rough air v_{RA} 150 km/h In winch-launch v_W 120 km/h in aero-tow v_T 135 km/h
8. Approved Operations Capability	Approved for VFR-flying in daytime.



9. Maximum Masses

Max. Mass	350kg
Max. Mass of Non-Lifting Part	225kg

10. Centre of Gravity Range

Forward Limit	256 mm aft of datum point
Rearward Limit	380 mm aft of datum point

11. Datum

Wing leading edge $y=425$ mm from the centreline

12. Control surface deflections

Refer to Maintenance Manual

13. Levelling Means

Wedge 100:5,2 on rear top fuselage to be horizontal

14. Minimum Flight Crew

1

15. Maximum Passenger Seating Capacity

0

J.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight and Service Manual “Club Libelle 205”, issue October 1974, LBA-approved.
- Replacement pages to the Glider Flight Manual “Club Libelle 205” initiated by Service Bulletins.
- Limitation placard.
- Trim sheet.

2. Maintenance Manual

- Service Manual “Club Libelle 205”
- Repair instruction U.Hänle, Fiberglas-Flugzeug-Flick-Fibel
- Manual for the Tost Releases, latest approved version

J.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Qualified for basic aerobatics according to the Flight Manual
5. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 18 of company Streifeneder, LBA-approved.
6. According to Service Bulletin No. 205-21 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, LBA-approved, the use of winglets is allowed.
7. In addition to J.IV.2.2.: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
8. According to Service Bulletin No.205 – 28 of Company H.Streifeneder, Glasfaser Flugzeugbau GmbH, EASA-approved, the use of the modified Winglets is allowed.



SECTION K: HORNET

K.I. General

1. Type/Model/ Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Hornet
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Glasflügel Segelflugzeugbau Hollighaus & Hillenbrand GmbH & Co. KG 7318 Lenningen/Württ. 1
4. Type Certification Application Date	05 February 1974
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	07 November 1975
7. EASA Type Certification Date	July 10 th 2008

K.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 30 – 304/74, dated February 13 th 1974
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), issue 27th June 1989 (Change 4 of the English original Issue), with JAR 22.375 (Winglets) from amendment 22/90/1 dated February 12th 1991 (see J.V.6)– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None



K.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings, LBA-Approved, November 1975
2. Description	Single seater, mid-wing sailplane, all composite glasfibre construction, air brake at the trailing edge, optional conventional wing tips or winglets (see K.V.8), water ballast tanks in the wings, T-tail, retractable landing gear with break.
3. Equipment	Min. Equipment: <ul style="list-style-type: none">– 1 Air speed indicator (up to 300 km/h)– 1 Altimeter– 1 4-Point harness (symmetrical)– 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed) Additional Equipment refer to Flight and Maintenance Manual
4. Dimensions	Wing Span 15,00 m
5. Launching Hooks	<ol style="list-style-type: none">1) Special Hook "SH72", LBA Datasheet No. 60.230/32) Nose tow hook "E72", LBA Datasheet No. 60.230/13) Nose tow hook "E75", LBA Datasheet No. 60.230/14) Nose tow hook "E85", LBA Datasheet No. 60.230/1
6. Weak links:	Note: Tow hook 2,3,4 optional Tow hook 4 see K.V.7 For winch launching max. 500 daN For aero towing max. 500 daN
7. Air Speeds	Manoeuvring Speed v_A 150 km/h Never Exceed Speed v_{NE} 250 km/h Maximum permitted speeds In rough air v_{RA} 150 km/h In winch-launch v_W 150 km/h in aero-tow v_T 135 km/h
8. Approved Operations Capability	Approved for VFR-flying in daytime.
9. Maximum Masses	Max. Mass 420kg Max. Mass of Non-Lifting Part 225kg



10. Centre of Gravity Range	
Forward Limit	250 mm aft of datum point
Rearward Limit	375 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0



K.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight and Service Manual “Hornet”, issue October 1975, LBA-approved.
- Replacement pages to the Glider Flight Manual “Hornet” initiated by Service Bulletins.
- Limitation placard.
- Trim sheet.

2. Maintenance Manual

- Service Manual “Hornet” (see above)
- Manual for the Tost Releases, latest approved version

K.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Qualified for basic aerobatics according to the Flight Manual
5. Compared to the serial production the following S/N have the defined major modification :
 - S/N 1 : High wing sailplane ; max. mass : 350 kg
 - S/N 2 : max. mass : 350 kg
 - S/N 4 : winch launching : not allowed
6. Compared to the serial production the S/N 89 has the following major modifications :
 - No water ballast ; modified airbrake drive
 - Maximum permitted speeds :
 - Never Exceed Speed vNE : 200 km/h
 - In Winch-launch vW : 120 km/h
 - Max. Mass : 350 kg
 - Glider Flight and Service Manual « Hornet », issue October 1975, LBA-approved, modified in this matter.
7. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 15 of company Streifeneder, LBA-approved.
8. According to Service Bulletin No. 206-20 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, LBA-approved, the use of winglets is allowed.
9. In addition to K.IV.2: Service Bulletin 1-2205 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
10. According to Service Bulletin No. 206-28 of Company H. Streifeneder, Glasfaser Flugzeugbau GmbH, EASA-approved, the use of modified Winglets is allowed.



SECTION L: HORNET C

L.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Hornet C
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Glasflügel Segelflugzeugbau Hollighaus & Hillenbrand GmbH & Co. KG 7318 Lenningen/Württ. 1
4. Type Certification Application Date	28 February 1978
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	23 April 1980
7. EASA Type Certification Date	10 July 2008

L.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 3 – 304/79, dated March 29 th 1979
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes – (LFS), issue 1966– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

L.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings, LBA- Approved, April 1980
2. Description	Single seater, mid-wing sailplane, all composite construction, fuselage glas fibre, wing carbon fibre with water ballast tanks, air brake



at the trailing edge,
conventional wing T-tail,
retractable landing gear with
break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see L.V.6

6. Weak links:

For winch launching

max. 500 daN

For aero towing

max. 500 daN

7. Air Speeds

Manoeuvring Speed v_A

150 km/h

Never Exceed Speed v_{NE}

250 km/h

Maximum permitted speeds

In rough air v_{RA}

150 km/h

In winch-launch v_W

150 km/h

in aero-tow v_T

150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.

9. Maximum Masses

Max. Mass

450kg

Max. Mass of Non-Lifting Part

225kg



10. Centre of Gravity Range	
Forward Limit	250 mm aft of datum point
Rearward Limit	375 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

L.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight and Service Manual “Hornet C”, issue March 1980, LBA-approved.
- Replacement pages to the Glider Flight Manual “Hornet C” initiated by Service Bulletins.
- Limitation placard.
- Trim sheet.

2. Maintenance Manual

- Service Manual “Hornet C ” (see above)
- Manual for the Tost Releases, latest approved version

L.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Qualified for basic aerobatics according to the Flight Manual
5. Compared to the serial production the following S/N have the defined major modification :
S/N 90,91,92,93: Water ballast tank as intergral tank in the wings.
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 15 of company Streifeneder, LBA-approved.
7. In addition to L.IV.2.: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.



SECTION M: MOSQUITO

M.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Mosquito
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Glasflügel Segelflugzeugbau Hollighaus & Hillenbrand GmbH & Co. KG 7318 Lenningen/Württ. 1
4. Type Certification Application Date	10 November 1975
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	26 January 1977
7. EASA Type Certification Date	10 July 2008

M.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 3 – 318/75, dated 18 th November 1975
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes and powered sailplanes – (LFSM), issue October 23rd 1975– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

M.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings: Mosquito, dated January 1977
2. Description	Single seater, mid-wing sailplane, all composite glas fibre construction, water ballast tanks, flaps combined



3. Equipment

with the air brake at the trailing edge, conventional wing tips, T-tail, retractable landing gear with break.

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional
Tow hook 4 see M.V.6

6. Weak links:

For winch launching

max. 650 daN

For aero towing

max. 650 daN

7. Air Speeds

Manoeuvring Speed v_A

200 km/h

Never Exceed Speed v_{NE}

250 km/h

Maximum permitted speeds

With flaps at -1,-2,0

250 km/h

With flaps at +1,+2

200 km/h

In rough air v_{RA}

200 km/h

In winch-launch v_W

150 km/h

in aero-tow v_T

150 km/h

8. Approved Operations Capability

Approved for VFR-flying in daytime.

9. Maximum Masses

Max. Mass

450kg

Max. Mass of Non-Lifting Part

240kg



10. Centre of Gravity Range	
Forward Limit	235 mm aft of datum point
Rearward Limit	360 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

M.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Mosquito”, issue January 1977, LBA-approved.

2. Maintenance Manual

- Service Manual “Mosquito”, issue January 1977
- Manual for the Tost Releases, latest approved version

M.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Qualified for basic aerobatics according to the Flight Manual
5. Actions and obligations in the sense of Part 21 for the type „Mosquito“ have been transferred to: Glasfaser-Flugzeug-Service, Hofener Weg, 72582 Grabenstetten, Germany
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 16 of company Streifeneder, LBA-approved.
7. In addition to M.IV.2 : Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH ; Accepted repair methods according to EU-vO 1702/2003, Part 21, subpart M.
8. The optional use of winglets is allowed by major change approval 10084494.



SECTION N: MOSQUITO B

N.I. General

1. Type/ Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Mosquito B
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Glasflügel Segelflugzeugbau Hollighaus & Hillenbrand GmbH & Co. KG 7318 Lenningen/Württ. 1
4. Type Certification Application Date	19 September 1977
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	29 November 1977
7. EASA Type Certification Date	10 July 2008

N.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 321 – 318/77, dated September 23 rd 1977
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes and powered sailplanes – (LFSM), issue October 23rd 1975– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
5. Equivalent Safety Findings	None
6. Environmental Protection	None

N.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings: Additions to the list of drawings of the basic type “Mosquito”
2. Description	Single seater, mid-wing sailplane, all composite glas fibre construction, water



ballast tanks, flaps combined with the air brake at the trailing edge, conventional wing tips, T-tail, horizontal tail reduced to 2,1 m span compared to the "Mosquito", retractable landing gear with break.

3. Equipment

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional

Tow hook 4 see N.V.6

6. Weak links:

For winch launching

max. 650 daN

For aero towing

max. 650 daN

7. Air Speeds

Manoeuvring Speed v_A

200 km/h

Never Exceed Speed v_{NE}

250 km/h

Maximum permitted speeds

With flaps at -1,-2,0

250 km/h

With flaps at +1,+2

200 km/h

In rough air v_{RA}

200 km/h

In winch-launch v_W

150 km/h

in aero-tow v_T

150 km/h



8. Approved Operations Capability	Approved for VFR-flying in daytime.
9. Maximum Masses	
Max. Mass	450kg
Max. Mass of Non-Lifting Part	240kg
10. Centre of Gravity Range	
Forward Limit	200 mm aft of datum point
Rearward Limit	325 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

N.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Mosquito B”, issue October 1977, LBA-approved.

2. Maintenance Manual

- Service Manual “Mosquito B”, issue October 1977
- Manual for the Tost Releases, latest approved version

N.V. Notes

1. Manufacturing is confined to industrial production
2. All parts exposed to sun radiation – except the areas for markings and registration – must have a white coloured surface.
3. Qualified for cloud flying according to the Flight Manual
4. Qualified for basic aerobatics according to the Flight Manual
5. Actions and obligations in the sense of Part 21 for the type „Mosquito B“ have been transferred to: Glasfaser-Flugzeug-Service, Hofener Weg, 72582 Grabenstetten, Germany
6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 16 of company Streifeneder, LBA-approved.
7. In addition to N.IV.2.: Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
8. The optional use of winglets is allowed by major change approval 10084494.



SECTION O: GLASFLÜGEL 304

O.I. General

1. Type/Model/Variant	
1.1 Type	Glasflügel Sailplanes
1.2 Model	Glasflügel 304
2. Airworthiness Category	Sailplane – Utility “U”
3. Manufacturer	Glasflügel Deutsch-Brasilianische Flugzeug-und Fahrzeug GmbH 7318 Lenningen 1
4. Type Certification Application Date	30 April 1980
5. State of Design Authority	Germany
6. State of Design Authority Type Certificate Date	22 September 1980
7. EASA Type Certification Date	10 July 2008

O.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements	Defined by LBA letter I 3 – 318/80, dated May 08 th 1980
2. Airworthiness Requirements	<ul style="list-style-type: none">– Airworthiness Requirements for Sailplanes and powered sailplanes – (LFSM), issue 23rd October 1975– Standards for Structural Substantiation of Sailplane Components consisting of Glass Fibre Reinforced Plastics, issue March 1965
3. Special Conditions	None
4. Exemptions	None
6. Equivalent Safety Findings	None
7. Environmental Protection	None

O.III. Technical Characteristics and Operational Limitations

1. Type Design Definition	List of drawings: “Glasflügel 304”, LBA-approved September 17 th 1980
2. Description	Single seater, mid-wing sailplane, all composite glass fibre construction, water ballast tanks, flaps combined



3. Equipment

with the air brake at the trailing edge, optional conventional wing tips or winglets (see O.V.8), T-tail, horizontal tail reduced to 2,1 m span compared to the "Mosquito", retractable landing gear with break.

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 4-Point safety harness (symmetrical)
- 1 Parachute or back cushion per person (thickness approx.. 10cm/3.94 in when compressed)

Additional Equipment refer to Flight and Maintenance Manual

4. Dimensions

Wing Span 15,00 m

5. Launching Hooks

- 1) Special Hook "SH72", LBA Datasheet No. 60.230/3
- 2) Nose tow hook "E72", LBA Datasheet No. 60.230/1
- 3) Nose tow hook "E75", LBA Datasheet No. 60.230/1
- 4) Nose tow hook "E85", LBA Datasheet No. 60.230/1

Note:

Tow hook 2,3,4 optional

Tow hook 4 see O.V.6

6. Weak links:

For winch launching

max. 650 daN

For aero towing

max. 650 daN

7. Air Speeds

Manoeuvring Speed v_A

200 km/h

Never Exceed Speed v_{NE}

250 km/h

Maximum permitted speeds

With flaps at -1,-2,0

250 km/h

With flaps at +1,+2

200 km/h

In rough air v_{RA}

200 km/h

In winch-launch v_W

150 km/h

in aero-tow v_T

150 km/h



8. Approved Operations Capability	Approved for VFR-flying in daytime.
9. Maximum Masses	
Max. Mass	450kg
Max. Mass of Non-Lifting Part	240kg
10. Centre of Gravity Range	
Forward Limit	200 mm aft of datum point
Rearward Limit	325 mm aft of datum point
11. Datum	Wing leading edge $y=425$ mm from the centreline
12. Control surface deflections	Refer to Maintenance Manual
13. Levelling Means	Wedge 100:5,2 on rear top fuselage to be horizontal
14. Minimum Flight Crew	1
15. Maximum Passenger Seating Capacity	0

O.IV. Operating and Service Instructions

1. Flight Manual

- Glider Flight Manual “Glasflügel 304”, issue August 1980, LBA-approved.

2. Maintenance Manual

- Service Manual “Glasflügel 304”, issue August 1980
- Manual for the Tost Releases, latest approved version

O.V. Notes

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6. The installation of a nose tow hook „E85“ is allowed according to the Service Bulletin No. 16 of company Streifeneder, LBA-approved.
7. In addition to O.IV.2. : Service Bulletin 1-2005 of Company Glasfaser Flugzeug-Service GmbH ; Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M.
8. According to Service Bulletin No. 304-13 of Company Glasfaser Flugzeug-Service, GmbH, H. Streifeneder, the use of winglets is allowed.



SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

II. Type Certificate Holder Record

III.

Fa.Glasflügel Ing. Eugen Hänle 7311 Schlattstall
Glasfaser Flugzeug-Service GmbH Hofener Weg 72582 Grabenstetten

IV. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	10 th July 2008	Transfer of Glasflügel Sailplanes to EASA Type Design	Initial Issue,
Issue 02	11 th May 2015	-Addition of SB1-2005: "Accepted repair methods according to EU-VO 1702/2003, Part 21, subpart M" under: .. V.Notes -Certification of winglets for the variant Glasflügel 304 -Correction of issue date of the supplement to the Glider Flight Manual "Standard Libelle 201 B"	
Issue 3	September 15 th 2022	-Certification of modified winglets for the Standard Libelle, Standard Libelle 201 B, Club-Libelle 205 and Hornet, changes under V.Notes	
Issue 4	September 27 th 2022	- Correction of erros/typos due to the transfer from issue 2 to issue 3 - B.III.13 correction of the information in accordance with the Flight Manual - E.III.2 correction of the wrong description of the gear	
Issue 5	16 th May 2024	- Certification of winglets for the models Mosquito and Mosquito B - Correction aero-tow speed of the model Hornet	

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