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SECTION C2: Reserved

SECTION A1: GENERAL, Glasflügel 304 CZ Type Design

A1. General

Data Sheet No.:	EASA.A.030	Issue:	01	Date:	February 4, 2005
1. a) Type:		Glasflügel 304 CZ			
b) Variant:		Glasflügel 304 CZ			
2. Airworthiness Category:		Utility			
3. Type Certificate Holder:		HPH, spol.s r.o. Čáslavská 126, P. O. Box 112 284 01 Kutná Hora CZECH REPUBLIC			
4. Manufacturer:		HPH, spol.s r.o. Čáslavská 126, P. O. Box 112 284 01 Kutná Hora CZECH REPUBLIC			
5. Certification Application Date:		March 20, 1996			
6. CAA CZ certification date:		April 2, 1998			
7. The EASA Type Certificate replaces the Czech Republic Certificate No. 98-03					

AII. Certification Basis

1. Reference Date for determining the applicable requirements:	March 20, 1996
2. Certification Basis:	As defined by the CAA CZ letter 1941/720-TI/96/Př dated. March 20, 1996
3. Airworthiness Requirements:	Airworthiness Requirements for Sailplanes and powered Sailplanes (LFSM), Edition October 23, 1975
4. Requirements elected to comply:	None
5. EASA Special Conditions:	- Directions for the stress analysis of components for sailplanes constructed from glass fiber reinforced plastic, Edition March 1965 - Subpart F and G of Joint Aviation Requirements (JAR 22), change 5, October 28, 1995 - JAR 22.375 (change 5)
6. EASA Exemptions:	None
7. EASA Equivalent Safety Findings:	None

Comment [JP1]: Stránka: 1
Dopis

AIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: - List of Drawings for Sailplane "Glasflügel 304 B"
-Amendment of List for "Glasflügel 304 CZ",
dated March 1998.
2. Description: Single seat mid-wing cantilever sailplane fiber
construction, 2-piece wing, trailing edge airbrakes
combined with flaps, wing water ballast -
polyethylene water ballast tanks, retractable wheel,
wheel-brake, tail wheel, T-tail (fixed stabilizer with
elevator, fin and rudder), winglets.
3. Equipment: Airspeed indicator up to 270 km/h
Altimeter
4-piece safety harness
Parachute or cushion (thickness approx. 10 cm
when compressed)
4. Dimensions:

Span	15.0 m
Length	6.45 m
Height	1.15 m
Wing Area	9.88 m ²
Aspect Ratio:	22,78
5. Launching Hooks: Nose tow hook "E72", LBA approved -
No.:60.230/1 or
Nose tow hook " E75", LBA approved -
No.:60.230/1 or
Nose tow hook " E85", LBA approved -
No.:60.230/1
Safety C.G. tow hook "SH 72", LBA approved -
No.:60.230/3 or
Safety C.G. tow hook " Europa G 88", LBA
approved - No.:60.230/2.
6. Weak links: Ultimate strength:

- for winch launching	max. 6500 N
- for aerotow	max. 6500 N
7. Air Speeds:

Manoeuvring Speed V_A	200 km/h IAS
Never Exceed Speed V_{NE} , flaps 0,-1,-2	
up to 4000 m MSL	250 km/h IAS
from 4000 to 5000 m MSL	240 km/h IAS
from 5000 to 6000 m MSL	226 km/h IAS
from 6000 to 7000 m MSL	214 km/h IAS
from 7000 to 8000 m MSL	202 km/h IAS
from 8000 to 9000 m MSL	191 km/h IAS
from 9000 to 10000 m MSL	179 km/h IAS
from 10000 to 12000 m MSL	159 km/h IAS
Max. permitted v_{FE} , flaps +1, +2	200 km/h IAS
Rough Air Speed V_{RA}	200 km/h IAS
Max. Aerotow Speed V_T	150 km/h IAS
Max. Winch-launch Speed V_W	150 km/h IAS
8. Operational Capability: VFR Day

9. Maximum Weights:
Maximum weight: 450 kg
Maximum weight of non lifting parts: 240 kg
10. Centre of Gravity Range: Max. forward c/g position aft of datum: 7.87 in (200 mm)
Max. rearward c/g position aft of datum: 14.17 in.(325 mm)
[MAC is 682 mm]
11. Datum: Wing leading edge at root rib
12. Levelling Means: Wedge 100:5,2 on slope of rear top fuselage to be horizontal
13. Minimum Flight Crew: 1 (Pilot)
14. Maximum Passenger Seating Capacity: ---
15. Lifetime limitations: Refer to Maintenance Manual
16. Deflection angles of control surfaces:
- | | | |
|-----------|-----------------|------------------------------|
| Elevator: | up and down | $17^{\circ} \pm 2^{\circ}$ |
| Rudder: | right and left: | $25^{\circ} \pm 2^{\circ}$ |
| Aileron: | up | $23^{\circ} \pm 2^{\circ}$ |
| | down | $10^{\circ} \pm 2^{\circ}$ |
| Flap: | up | $08^{\circ} \pm 1,5^{\circ}$ |
| | down | $12^{\circ} \pm 1,5^{\circ}$ |

AIV. Operating and Service Instructions

Flight Manual (FM): CAA CZ approved Flight Manual "Glasflügel 304 CZ", Issue of January 1998

Maintenance Manual (AMM)
(Including Airworthiness Limitations): Service manual "Glasflügel 304 CZ" (Maintenance), Issue of January 1998

Operation instruction for the TOST nose tow release mechanism:
"E72" and "E75", Issue of May 1975, LBA approved.
"E72" and "E75", Issue of March 1988, LBA approved - for overhauled tow hook only.
"E85", Issue of March 1989, LBA approved

Operation instruction for the TOST safety tow release mechanism:
"S72" and "SH72", Issue of May 1975, LBA approved.
"S72" and "SH72", Issue of July 1989, LBA approved - overhauled tow hook only.

Tost Manual for the launching hook "Europa G 88", Issue of February 1989, LBA approved.

AV. Notes

1. Serial numbers affected.: 4,8,10 and all serial numbers formated XX-15
2. Type Certification in Czech Republic: Type Certified on April 2nd 1998 by validation of 7th Revision of Type Certificate No.: 318, approved by LBA on November 28th 1990, and by Additional Certification.
3. Only industrial production permitted .
4. All external portions exposed to sunlight must be painted white, except of the areas for the registration and anti-collision markings .

SECTION A2: Reserved

SECTION B1: GENERAL, Glasflügel 304 CZ-17 Type Design

B1. General

- | | | | | | |
|---|------------|--|----|-------|------------------|
| Data Sheet No.: | EASA.A.030 | Issue: | 01 | Date: | February 4, 2005 |
| 1. a) Type: | | Glasflügel 304 CZ | | | |
| b) Variant: | | Glasflügel 304 CZ-17 | | | |
| 2. Airworthiness Category: | | Utility | | | |
| 3. Type Certificate Holder: | | HPH, spol.s r.o.
Čáslavská 126,
P. O. Box 112
284 01 Kutná Hora
CZECH REPUBLIC | | | |
| 4. Manufacturer: | | HPH, spol.s r.o.
Čáslavská 126,
P. O. Box 112
284 01 Kutná Hora
CZECH REPUBLIC | | | |
| 5. Certification Application Date: | | October 9, 2000 | | | |
| 6. CAA CZ Certification Date: | | October 23, 2000 | | | |
| 7. The EASA Type Certificate replaces Czech Republic Type Certificate No. 98-03 | | | | | |

BII. Certification Basis

- | | |
|--|---|
| 1. Reference Date for determining the applicable requirements: | March 20, 1996 |
| 2. Certification Basis: | As defined by the CAA CZ letter 1941/720-TI/96/Př dated. March 20, 1996 |
| 3. Airworthiness Requirements: | Airworthiness Requirements for Sailplanes and powered Sailplanes (LFSM), Edition October 23, 1975 |
| 4. Requirements elected to comply: | None |
| 5. EASA Special Conditions: | - Directions for the stress analysis of components for sailplanes constructed from glass fiber reinforced plastic, Edition March 1965
- Subpart F and G of Joint Aviation Requirements (JAR 22), change 5, October 28, 1995
- JAR 22.375 (change 5) |
| 6. EASA Exemptions: | None |
| 7. EASA Equivalent Safety Findings: | None |

BIII. Technical Characteristics and Operational Limitations

1. Type Design Definition:
 - List of Drawings for Sailplane " Glasflügel 304 B"
 - Amendment of List for " Glasflügel 304 CZ", dated March 1998.
 - Amendment of Drawings for Wing Extensions.

2. Description:

Single seat mid-wing cantilever sailplane fiber construction, 2-piece wing, trailing edge airbrakes combined with flaps, wing water ballast - polyethylene water ballast tanks, retractable wheel, wheel-brake, tail wheel, T-tail (fixed stabilizer with elevator, fin and rudder), interchangeable winglets and wing extensions for wing span 17,43 m.

3. Equipment:
 - Airspeed indicator up to 270 km/h
 - Altimeter
 - 4-piece safety harness
 - Parachute or cushion (thickness approx. 10 cm when compressed)

4. Dimensions:

Span	15.0 m	optionally	17,43 m
Length	6.45 m		
Height	1.15 m		
Wing Area	9.88 m ²	optionally	10,68 m ²
Aspect Ratio:	22,78 or 28,44		

5. Launching Hooks:
 - Nose tow hook "E72", LBA approved - No.:60.230/1 or
 - Nose tow hook " E75", LBA approved - No.:60.230/1 or
 - Nose tow hook " E85", LBA approved - No.:60.230/1
 - Safety C.G. tow hook "SH 72", LBA approved - No.:60.230/3 or
 - Safety C.G. tow hook " Europa G 88", LBA approved - No.:60.230/2.

6. Weak links:

Ultimate strength for winch launching and aerotow max. 6500 N

7. Air Speeds:

Manoeuvring Speed V_A	180 km/h IAS
Never Exceed Speed V_{NE} , flaps 0,-1,-2	
up to 4000 m MSL	250 km/h IAS
from 4000 to 5000 m MSL	240 km/h IAS
from 5000 to 6000 m MSL	226 km/h IAS
from 6000 to 7000 m MSL	214 km/h IAS
from 7000 to 8000 m MSL	202 km/h IAS
from 8000 to 9000 m MSL	191 km/h IAS
from 9000 to 10000 m MSL	179 km/h IAS
from 10000 to 12000 m MSL	159 km/h IAS
Max. permitted v_{FE} , flaps +1, +2	180 km/h IAS
Rough Air Speed V_{RA}	180 km/h IAS
Max. Aerotow Speed V_T	150 km/h IAS
Max. Winch-launch Speed V_W	150 km/h IAS

8. Operational Capability: VFR Day
9. Maximum Weights:
Maximum weight 450 kg
Maximum weight of non lifting parts 240 kg
10. Centre of Gravity Range: Max. forward c/g position aft of datum: 200 mm
Max. rearward c/g position aft of datum: 318
[MAC is 682 mm or 625 mm]
11. Datum: Wing leading edge at root rib
12. Levelling Means: Wedge 100:5,2 on slope of rear top fuselage to be horizontal
13. Minimum Flight Crew: 1 (Pilot)
14. Maximum Passenger Seating Capacity: ---
15. Lifetime limitations: Refer to Maintenance Manual
16. Deflection angles of control surfaces:
- | | | |
|-----------|-----------------|------------------------------|
| Elevator: | up and down | $17^{\circ} \pm 2^{\circ}$ |
| Rudder: | right and left: | $25^{\circ} \pm 2^{\circ}$ |
| Aileron: | up | $23^{\circ} \pm 2^{\circ}$ |
| | down | $10^{\circ} \pm 2^{\circ}$ |
| Flap: | up | $08^{\circ} \pm 1,5^{\circ}$ |
| | down | $12^{\circ} \pm 1,5^{\circ}$ |

BIV. Operating and Service Instructions

Flight Manual (FM): CAA CZ approved Flight Manual "Glasflügel 304 CZ-17", Issue of March 2000

Maintenance Manual (AMM)
(Including Airworthiness Limitations): Service manual "Glasflügel 304 CZ-17" (Maintenance), Issue of March 2000

Operation instruction for the TOST nose tow release mechanism:
"E72" and "E75", Issue of May 1975, LBA approved.
"E72" and "E75", Issue of March 1988, LBA approved - for overhauled tow hook only.
"E85", Issue of March 1989, LBA approved

Operation instruction for the TOST safety tow release mechanism:
"S72" and "SH72", Issue of May 1975, LBA approved.
"S72" and "SH72", Issue of July 1989, LBA approved - overhauled tow hook only.

Tost Manual for the launching hook "Europa G 88", Issue of February 1989, LBA approved.

BV. **Notes**

1. Serial numbers affected 1,2,3,5,6,7,9,11,12,14,15,16,17 and all serial numbers formatted XX-17
2. Sailplane has been approved in compliance with Subpart B of Joint Aviation Requirements (JAR 22), change 5, October 28th 1995 for 17.43 m configuration
3. Only industrial production permitted.
4. All external portions exposed to sunlight must be painted white, except of the areas for the registration and anti-collision markings.

SECTION B2: Reserved

SECTION C1: GENERAL, Glasflügel 304 C Type Design

C1. General

Data Sheet No.: EASA.A.030	Issue: 01	Date: February 4, 2005
1. a) Type:	Glasflügel 304 CZ	
b) Variant:	Glasflügel 304 C	
2. Airworthiness Category:	Utility	
3. Type Certificate Holder:	HPH, spol.s r.o. Čáslavská 126, P. O. Box 112 284 01 Kutná Hora CZECH REPUBLIC	
4. Manufacturer:	HPH, spol.s r.o. Čáslavská 126, P. O. Box 112 284 01 Kutná Hora CZECH REPUBLIC	
5. Certification Application Date:	November 15, 2000	
6. CAA CZ Certification Date:	July 25, 2001	
7. The EASA Type Certificate replaces Czech Republic Type Certificate No. 98-03		

CII. Certification Basis

1. Reference Date for determining the applicable requirements:	March 20, 1996
2. Certification Basis:	As defined by the CAA CZ letter 15511/4081-TI/00/Sh dated 1. March 2000
3. Airworthiness Requirements:	Airworthiness Requirements for Sailplanes and powered Sailplanes (LFSM), Edition October 23, 1975
4. Requirements elected to comply:	None
5. EASA Special Conditions:	- Directions for the stress analysis of components for sailplanes constructed from glass fiber reinforced plastic, Edition March 1965 - Subpart F and G of Joint Aviation Requirements (JAR 22), change 5, October 28, 1995 - JAR 22.375 (change 5)
6. EASA Exemptions:	None
7. EASA Equivalent Safety Findings:	None

Comment [JP2]: Stránka: 1
Dopis

CIII. Technical Characteristics and Operational Limitations

1. Type Design Definition: -List of Drawings for Sailplane " Glasflügel 304 B"
-Amendment of List for " Glasflügel 304 CZ", dated March 1998.
-Amendment of List for "Glasflügel 304 C"
2. Description: Single seat mid-wing cantilever sailplane fiber construction, 2-piece wing, S-H airbrakes, wing water ballast - polyethylene water ballast tanks, retractable wheel, wheel-brake, tail wheel, T-tail (fixed stabilizer with elevator, fin and rudder) , interchangeable winglets.
3. Equipment: Airspeed indicator up to 270 km/h
Altimeter
4-piece safety harness
Parachute or cushion (thickness approx. 10 cm when compressed)
4. Dimensions:

Span	15.0 m
Length	6.45 m
Height	1.15 m
Wing Area	9.88 m ²
Aspect Ratio:	22,78
5. Launching Hooks: Nose tow hook "E72", LBA approved - No.:60.230/1 or
Nose tow hook " E75", LBA approved - No.:60.230/1 or
Nose tow hook " E85", LBA approved - No.:60.230/1
Safety C.G. tow hook "SH 72", LBA approved - No.:60.230/3 or
Safety C.G. tow hook " Europa G 88", LBA approved - No.:60.230/2.
6. Weak links: Ultimate strength for winch launching and aerotow max. 6500 N
7. Air Speeds:

Manoeuvring Speed V_A , flaps +1, +2	200 km/h IAS
Never Exceed Speed V_{NE} , flaps 0,-1,-2	
up to 4000 m MSL	250 km/h IAS
from 4000 to 5000 m MSL	240 km/h IAS
from 5000 to 6000 m MSL	226 km/h IAS
from 6000 to 7000 m MSL	214 km/h IAS
from 7000 to 8000 m MSL	202 km/h IAS
from 8000 to 9000 m MSL	191 km/h IAS
from 9000 to 10000 m MSL	179 km/h IAS
from 10000 to 12000 m MSL	159 km/h IAS
Rough Air Speed V_{RA}	200 km/h IAS
Max. Aerotow Speed V_T	150 km/h IAS
Max. Winch-launch Speed V_W	150 km/h IAS
8. Operational Capability: VFR Day

9. Maximum Weights:
Maximum weight 450 kg
Maximum weight of non lifting parts 240 kg
10. Centre of Gravity Range: Max. forward c/g position aft of datum: 200 mm
Max. rearward c/g position aft of datum: 325 mm
[MAC is 682 mm]
11. Datum: Wing leading edge at root rib
12. Levelling Means: Wedge 100:5,2 on slope of rear top fuselage to be horizontal
13. Minimum Flight Crew: 1 (Pilot)
14. Maximum Passenger Seating Capacity: ---
15. Lifetime limitations: Refer to Maintenance Manual
16. Deflection angles of control surfaces:
- | | | |
|-----------|-----------------|----------|
| Elevator: | up and down | 17° ± 2° |
| Rudder: | right and left: | 25° ± 2° |
| Aileron: | up | 23° ± 2° |
| | down | 10° ± 2° |

CIV. Operating and Service Instructions

Flight Manual (FM): CAA CZ approved Flight Manual "Glasflügel 304 C", Issue of April 2001

Maintenance Manual (AMM)
(Including Airworthiness Limitations): Service manual "Glasflügel 304 C" (Maintenance), Issue of April 2001

Operation instruction for the TOST nose tow release mechanism:
"E72" and "E75", Issue of May 1975, LBA approved.
"E72" and "E75", Issue of March 1988, LBA approved - for overhauled tow hook only.
"E85", Issue of March 1989, LBA approved

Operation instruction for the TOST safety tow release mechanism:
"S72" and "SH72", Issue of May 1975, LBA approved.
"S72" and "SH72", Issue of July 1989, LBA approved - overhauled tow hook only.

Tost Manual for the launching hook "Europa G 88", Issue of February 1989, LBA approved.

CV. **Notes**

1. Serial numbers affected are formatted XX-C.
2. Sailplane has been approved in compliance with Subpart B of Joint Aviation Requirements (JAR 22), change 5, October 28th 1995 for 17.43 m configuration
3. Only industrial production permitted.
4. All external portions exposed to sunlight must be painted white, except of the areas for the registration and anti-collision markings.

SECTION C2: Reserved