EASA

TYPE-CERTIFICATE
DATA SHEET

EASA.A.044

L 23 SUPER-BLANÍK

Type Certificate Holder:

Blanik Aircraft CZ s.r.o.
Karolinská 661/4
186 00 Praha 8
Czech Republic

For models: L 23 SUPER-BLANÍK

Issue 07: 17 May 2019
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**A.I. General**

Data Sheet No.: EASA.A.044  
Issue: 07  
Date: 17 May 2019

1. **Model:**  
L 23 SUPER-BLANÍK

2. **Airworthiness Category:**  
Utility

3. **TC Holder:**  
Blanik Aircraft CZ s.r.o.  
Karolinská 661/4  
186 00 Praha 8  
Czech Republic

   from S/N 897501 to S/N 907625  
   LET, k.p.  
   686 04 Kunovice 1177  
   Czech Republic

4. **Manufacturer:**  
from S/N 907626 to S/N 018809  
   LET, a.s.  
   686 04 Kunovice 1177  
   Czech Republic

   from S/N 018810 to S/N 069204  
   LETECKÉ ZÁVODY a.s.  
   686 04 Kunovice 1177  
   Czech Republic

   from S/N 182301  
   Blanik Aircraft CZ s.r.o.  
   186 00 Praha 8  
   Czech Republic

5. **Certification Application Date:**  
1989

6. **CAA CZ Type Certification Date:**  
August 28, 2001

7. **EASA Type Certification Date:**  
August 12, 2005 (see Note 2)

8. **The EASA Type Certificate replaces:**  
Czech Type Certificate No.: 89-02

**A.II. Certification Basis**

1. **Reference Date for determining the applicable requirements:**  
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2. **Certification Basis:**  
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3. **Airworthiness Requirements:**  
Joint Aviation Requirements JAR 22, Change 4, May 7th 1987

4. **Requirements elected to comply:**  
None
5. EASA Special Conditions: None

6. EASA Exemptions: JAR 22.621: For fork casting the lower coefficient 1.25 is used in spite of the fact that only 1 pc was stress tested, instead of required 3 pcs.

7. EASA Equivalent Safety Findings: JAR 22.621: The lower coefficient is used for fork casting based on the non-linear stress analysis of the fork by the FEM in NASTRAN, X-ray examination of each fork casting and long-term operation experiences with fork casting of L 13, L 23, L 33 and L 13 AC gliders.

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing No.: A 700 007 N

2. Description: The L 23 SUPER-BLANÍK glider is all-metal two-seat self-contained high-wing glider with trapezoidal wing and T-tail. The rudder, elevator and ailerons are covered by canvas. The fuselage with oval cross section holds all systems and parts of glider. The trapezoidal wing is fitted with ailerons and air brakes. Both parts of wing are attached to the centre section hinges. From S/N 938101 incl. the wing extensions can be installed. The fin is an integral part of the fuselage, the rudder has none balancing tab. The stabilizer is attached to the fin. The elevator is divided and each half is fitted with the balancing tab. The control of rudders, balancing tabs and air brakes is mechanical from both pilot’s places. Retractable braked main landing gear is controlled from both pilot’s places. The rear landing gear is either steerable by 360° or fixed. Upholstered and ventilated cockpit covered by single canopy is equipped with two seats adapted for the shoulder parachute and fitted with tightening belts.

3. Equipment: air-speed indicator
altimeter
variometer
magnetic compass

4. Dimensions:

Span 16,20 or 18,20 m
Length 8,50 m
Height 1,9 m
Wing Area 19,15 or 20,00 m²
Aspect Ratio 13,7 or 16,6
5. Launching Hooks: 
Nose towing hook Draw. No. A 740 210 N 
or Nose towing hook "E85", LBA approved - No.:60.230/1 
Side towing hooks Draw. No. LN-0399 L 
(left) and LN-0400 P (right) 
Safety C.G. towing hook "Europa G 88", 
LBA approved - No.:60.230/2.

6. Weak links: 
Ultimate strength for winch launching and 
aerotow max. 6,5 kN

7. Air Speeds:

IAS airspeeds to and including S/N 938030:
- Never exceed speed \(V_{NE}\) 250 km/h IAS
- Rough air speed \(V_{RA}\) 160 km/h IAS
- Manoeuvring speed \(V_{A}\) 150 km/h IAS
- Maximum winch-launching \(V_{W}\) 120 km/h IAS
- Maximum aerotowing speed \(V_{T}\) 150 km/h IAS
- Maximum landing gear operating speed \(V_{LO}\) 230 km/h IAS

IAS airspeeds from and including S/N 938101 and from S/N 182301:
- Never exceed speed \(V_{NE}\) 230 km/h IAS
- Rough air speed \(V_{RA}\) 150 km/h IAS
- Manoeuvring speed \(V_{A}\) 150 km/h IAS
- Maximum winch-launching \(V_{W}\) 120 km/h IAS
- Maximum aerotowing speed \(V_{T}\) 150 km/h IAS
- Maximum landing gear operating speed \(V_{LO}\) 230 km/h IAS

8. Operational Capability: 
VFR flights only.

9. Weights:

To and including S/N 029004:
- Maximum weight 510 kg
- Empty weight of sailplane without extensions 310 kg + 2 %.
- Empty weight of sailplane with extensions 315 kg + 2 %.

From and including S/N 029005:
- Maximum weight 530 kg.
- Empty weight of sailplane without extensions 310 kg + 2 %.
- Empty weight of sailplane with extensions 315 kg + 2 %.

Minimum pilot weight (including the parachute) during solo flight 55 kg. (see note 1.)

10. Centre of Gravity Range: 
23 to 40 % of M.A.C. (M.A.C. = 1253 mm)

11. Datum: 
The datum is located 2376.5 mm behind 
the fuselage nose (the beginning of wing 
rib No. 1).
12. Levelling Means:

Sailplane adjustment for levelling:
- Longitudinal direction - levelling points No. 3 and 4 on the left side of fuselage
- Lateral direction - levelling point No. 9 on the left wing

Levelling points coordinates at sailplane’s coordinates system [mm] (origin of coordinates - fuselage nose tip, x-axis - rearward, y-axis - upward, z-axis - to the left):
- Levelling point 3 [4238; -90; 265.919]
- Levelling point 4 [65.22; -90; 142.475]
- Levelling point 9 [2295.087; 281.054; 4597.0]

13. Minimum Flight Crew:

1 (Pilot)

14. Maximum Passenger Seating Capacity:

1

15. Lifetime limitations:

Refer Maintenance Manual

16. Deflection angles of control surfaces:

<table>
<thead>
<tr>
<th>Control Surface</th>
<th>Up</th>
<th>±°</th>
<th>Down</th>
<th>±°</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elevator</td>
<td>32°</td>
<td>± 2°</td>
<td>25°</td>
<td>± 2°</td>
</tr>
<tr>
<td>Ailerons</td>
<td>34°</td>
<td>± 2°</td>
<td>13°</td>
<td>± 2°</td>
</tr>
<tr>
<td>Air brakes</td>
<td>65°</td>
<td>± 3°</td>
<td>75°</td>
<td>± 3°</td>
</tr>
<tr>
<td>Rudder left, right</td>
<td>30°</td>
<td>± 1°</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elevator trim tab</td>
<td>15°</td>
<td>± 1°</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

17. Load Factors:

To and including S/N 938030:
- 2.65; + 5.3 to 150 km/h
- 1.5; + 4.0 to 250 km/h

From and including S/N 938101 and from S/N 182301:
- 2.65; + 5.3 to 150 km/h
- 1.5; + 4.0 to 230 km/h
**A.IV. Operating and Service Instructions**

1. **L 23 Flight Manual:**
   - In Czech language: up-to and including 80th series Do-L23.1011.1
     from 81st series Do-L23.1012.1
     from 84th series Do-L23.1013.1
     from and including S/N 029005 Do-L23.1014.1
     from and including S/N 182301 Do-L23.1014.1
   - In English language (for the USA): up-to and including 80th series Do-L23.1011.5
     from 81st series Do-L23.1012.5
     from S/N 029005 Do-L23.1014.5
     from S/N 182301 Do-L23.1014.5
   - In English language (for Canada): from and including 80th series Do-L23.1011.3
     from 81st series Do-L23.1012.3
   - In German language: Do-L23.1011.4
   - In Russian language: Do-L23.1011.2

2. **L 23 Maintenance Manual:**
   - In Czech language: Do-L23.1031.1
   - In English language: Do-L23.1031.3
   - In German language: Do-L23.1031.4
   - In Russian language: Do-L23.1031.2

3. **Illustrated Parts Catalogue:**
   - In English language: Do-L23-2021.3

**A.V. Notes**

1. In case of pilot weight more than 55 kg but less than 70 kg (including the parachute); it is necessary to use a seat with ballast 15 kg.

2. This aircraft type was transferred to EASA on Accession of the Czech Republic (‘grandfathered’).

3. Since 20 June 2013 the TC holder obligations are covered by an agreement signed between new TC holder (BLANIK LIMITED) and Contracted DOA Holder (Aircraft Industries a.s.). For Continuing Airworthiness and other technical issues contact directly the Contracted DOA Holder.

4. Since 30 September 2016 the TC holder obligations are covered by an agreement signed between TC holder (BLANIK LIMITED) and Contracted DOA Holder (Blanik Aircraft CZ s.r.o. / EASA.21J.609). At the same time, a contract between TC holder and Aircraft Industries a.s. (EASA.21J.119) was terminated. For Continuing Airworthiness and other technical issues contact directly the new Contracted DOA Holder.

5. On 10 January 2017, Blanik Aircraft CZ s.r.o. / EASA.21J.609 became the TC holder.
ADMINISTRATIVE SECTION

I. Acronyms

N/A

II. Type Certificate Holder Record

Up to 19 June 2013

Aircraft Industries, a.s.
Na Záhonech 1177
686 04 Kunovice
Czech Republic

Up to 09 January 2017

BLANIK LIMITED
2nd Floor Beaux Lane House
Mercer Street Lower
Dublin 2
Republic of Ireland

Since 10 January 2017

Blanik Aircraft CZ s.r.o.
Karolínská 661/4
186 00 Praha 8
Czech Republic

III. Change Record

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<th>Issue</th>
<th>Date</th>
<th>Changes</th>
</tr>
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<tbody>
<tr>
<td>01</td>
<td>12 August 2005</td>
<td>Initial issue of TCDS No. EASA.A.044</td>
</tr>
<tr>
<td>02</td>
<td>09 September 2005</td>
<td>Change in the address of the TC holder</td>
</tr>
<tr>
<td>03</td>
<td>30 May 2006</td>
<td>Change in the address of the TC holder</td>
</tr>
<tr>
<td>04</td>
<td>20 June 2013</td>
<td>Change of the TC holder and new layout of TCDS</td>
</tr>
<tr>
<td>05</td>
<td>30 September 2016</td>
<td>Change of the Contracted DOA</td>
</tr>
<tr>
<td>06</td>
<td>10 January 2017</td>
<td>Change of the TC holder</td>
</tr>
<tr>
<td>07</td>
<td>17 May 2019</td>
<td>Changes related to serial production renewal by Blanik Aircraft CZ s.r.o.</td>
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</tbody>
</table>