
TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00034

for

LAK-17

Type Certificate Holder

JSC “Sportinė Aviacija ir KO”

Pociūnai

LT-59327 Prienai

Republic of Lithuania

Model(s): LAK-17A
LAK-17AT
LAK-17B FES
LAK-17B FES mini
LAK-17A mini

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Section 1 LAK-17A

I. General

1. a) Type: LAK-17
- b) Model: LAK-17A
- c) Sales Designation: LAK-17B from Serial No. 201

2. Airworthiness Category: Sailplane, JAR 22 - Utility

3. Manufacturer: JSC „Sportinė Aviacija ir KO“
LT-59327 Prienai
Republic of Lithuania

4. Lithuanian CAA Type Certification Date: 12 November 1999

II. Certification Basis

1. Certification Basis: JAR 22, Amdt. 5

2. Airworthiness Requirements: Joint Airworthiness Requirements for Sailplanes and Powered Sailplanes (JAR 22), effective 28 October 1995 (Amendment 5 of the English original version)

CS-22, Amendment 2 published on 5 March 2009^{Note3}

3. Requirements elected to comply: Standards for Structural Substantiation of Sailplane and Powered Sailplane Components consisting of Glass or Carbon Fiber Reinforced Plastics, issued July 1991

4. Environmental Standards: -

5. Special Conditions: -

6. Exemptions: -

7. Equivalent Safety Findings: Lak-17A - JAR 22.49: NPA 22B-83 and NPA 22C&D-84, LAK-17B – none ^{Note 3}

III. Technical Characteristic and Operating Limitations

- 1. Type Design Definition:** Lithuanian CAA approved List of Drawings LAK-17A issued 19.05.1999 with amendment 2002
- List of Drawings LAK-17B issued 01.02.2012
- 2. Description:** Single seat, mid-wing sailplane, CFRP/GFRP – construction, with flaps, T-tail (fixed horizontal stabilizer with elevator, fin and rudder), Schempp-Hirth type airbrakes on upper wing surface, water ballast tanks in the wing and in the fin, retractable main wheel with mechanical drum brake or hydraulic brake (BERINGER)^{Note3}. Optional with 15 m and Winglets or wingtip or 18 m wingspan.
- 3. Equipment:** Min. Equipment:
- 1 Air speed indicator (up to 300 km/h)
 - 1 Altimeter
 - 1 Outside air temperature indicator with sensor (when flying with water ballast)
 - 1 4-Point harness (symmetrical)
- For Additional Equipment refer to Flight Manual
- 4. Dimensions:**
- | | | | |
|-----------|---------------------|--------------------|---------------------------------------|
| Span | 15,0 m | 18,0 m | 18,0 m ^{Note3} |
| Wing Area | 9,06 m ² | 9,8 m ² | 10,32 m ² ^{Note3} |
- 5. Launching Hooks:** Safety hook „Europa G 88“, LBA Data sheet No. 60.230/2
- Aero tow hook and/or winch/auto-tow hook optional:
- 6. Weak links:** Max. Ultimate Strength:
- for winch and auto tow launching
650 daN 780 daN^{Note3}
 - for aero-tow
650 daN 780 daN^{Note3}

7. Air Speeds:	Manoeuvring Speed	V_A	205 km/h	190 km/h ^{Note3}
	Never Exceed Speed	V_{NE}	275 km/h	
	Maximum permitted speeds			
	- with flaps at	+1, +2, L	160 km/h	190 km/h ^{Note3}
	- with flaps at	-1, 0	275 km/h	
	- in rough air	V_{RA}	205 km/h	190 km/h ^{Note3}
	- in aero-tow	V_T	160 km/h	
	- in winch-launch	V_W	140 km/h	
	- for gear operating	V_{Lo}	205 km/h	
8. Maximum Masses:	Max. Mass		500 kg	600 kg ^{Note3}
	Max. Mass of Non-Lifting Parts		233 kg	276.3 kg ^{Note3}
9. Operational Capability	Approved for VFR-flying in daytime.			
10. Centre of Gravity Range:	Datum: wing leading edge at wing root			
	Leveling means: slope rear top fuselage 1000:29 horizontal			
	Forward Limit		182 mm (206 mm ^{Note3})aft of datum point	
	Rearward Limit		305 mm (328 mm ^{Note3})aft of datum point	
11. Minimum Flight Crew:	1 (Pilot)			
12. Maximum Seating Capacity:	1			
13. Lifetime limitations:	Refer to Maintenance Manual			
14. Deflection of control surfaces:	Refer to Maintenance Manual			

IV. Operating and Service Instructions

1. Flight Manual for LAK-17A sailplane, latest approved revision
2. Maintenance Manual for the LAK-17A sailplane, latest revision
3. Flight Manual for LAK-17B sailplane, latest approved revision^{Note3}
4. Maintenance Manual for the LAK-17B sailplane, latest revision^{Note3}
5. Operating Instructions for the Tost safety tow release mechanism model “EUROPA G 88”, latest approved revision

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 color surface.
3. From Serial No. 201 aircraft produced have introduced several modifications and data as given above and receive sales designation LAK-17B.

Section 2 LAK-17AT

I. General

2. a) Type: LAK-17
- b) Model: LAK-17AT
- c) Sales Designation: LAK-17BT from S/N 201 on

3. Airworthiness Category: Powered Sailplane, CS 22 - Utility

4. Manufacturer: JSC „Sportinė Aviacija ir KO“
LT-59327 Prienai
Republic of Lithuania

5. Application Date: 8 January 2003

6. EASA Type Certification Date: 21 April 2006

II. Certification Basis

1. Certification Basis: JAR 22, Lithuanian CAA decision, dated 16 April 2003

2. Airworthiness Requirements: Joint Airworthiness Requirements for
Sailplanes and Powered Sailplanes (JAR 22),
effective August 01, 2001
(Amendment 6 of the English original version)

CS-22, Amendment 2 published on 5 March 2009^{Note3}

3. Requirements elected to comply: Standards for Structural Substantiation
of Sailplane and Powered Sailplane
Components consisting of Glass or Carbon
Fiber Reinforced Plastics, issued July 1991

4. Environmental Standards: -

5. Special Conditions: -

6. Exemptions: -

7. Equivalent Safety Findings:

LAK-17AT - JAR 22.207(c) Stall warning, LAK-17BT – none^{Note3}

III. Technical Characteristic and Operating Limitations

1. Type Design Definition:

Lithuanian CAA approved List of Drawings for powered sailplane model "LAK-17AT", issue March 2006

List of Drawings LAK-17BT issued 25.04.2013

2. Description:

Single seat, mid-wing non-self launching powered sailplane, CFRP/GFRP/AFRP – construction, 2-piece wing (15m with wingtip or winglet) and with 18m tip extensions (with winglets), double-panel Schempp-Hirth type airbrakes on upper wing surface, water ballast tanks in the wing and in the fin; CFRP/GFRP/AFRP-fuselage, retractable main wheel with mechanical drum brake or hydraulic brake (BERINGER)^{Note3}, tail wheel, T-tail (fixed horizontal stabilizer with elevator, fin and rudder).

3. Equipment:

Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 Magnetic compass
- 1 Outside air temperature indicator with sensor (when flying with water ballast)
- 1 Engine control unit featuring:
 - RPM indicator
 - Engine hour meter
 - Fuel quantity indicator
 - battery level
 - cylinder head temperature indicator
- 1 Rear view mirror
- 1 4-Point harness (symmetrical)
- 1 Power supply
- 1 Required placards, check list and Flight Manual

For Additional Equipment refer to Flight Manual

4. Dimensions:

Span	15,0 m	18,0 m	18,0 m ^{Note3}
Wing Area	9,06 m ²	9,8 m ²	10,32 m ² ^{Note3}

5. Engine designation:	Solo 2350 LBA Type Certificate Data Sheet No. 4603		
6. Engine Limits:	Max. continuous Power	19,6 kW at 5500 RPM	
	Maximum RPM	6500 RPM	
7. Propellers:	LAK-P4-90, TCDS EASA P.014 Propeller diameter: 90 cm, blade pitch 57 cm (constant through the radius)		
8. Fluids and Fluid capacities:	Fuselage tank	7,5 l optionally +4,5 l	
	Non-usable amount of fuel	0,3 l	
9. Launching Hooks:	Safety hook „Europa G 88“, LBA Data sheet No. 60.230/2 Aero tow hook and/or winch/auto-tow hook optional:		
10. Weak links:	Max. Ultimate Strength:		
	- for winch and auto tow launching	650 daN	780 daN ^{Note3}
	- for aero-tow	650 daN	780 daN ^{Note3}
11. Air Speeds:	Manoeuvring Speed V_A	205 km/h	190 km/h ^{Note3}
	Never Exceed Speed V_{NE}	275 km/h	
	Maximum permitted speeds		
	- with flaps at +1, +2, L	160 km/h	190 km/h ^{Note3}
	- with flaps at -1, 0	275 km/h	
	- in rough air V_{RA}	205 km/h	190 km/h ^{Note3}
	- in aero-tow V_T	160 km/h	

- in winch-launch	V_W	140 km/h
- with power plant extended	V_W	160 km/h
- for extending power plant	V_{POmin}	90 km/h
- for retracting power plant	V_{POmax}	110 km/h
- for gear operating	V_{Lo}	205 km/h

- 12. Maximum Masses:**
- | | | |
|--------------------------------|--------|---------------------------|
| Max. Mass | 500 kg | 600 kg ^{Note3} |
| Max. Mass of Non-Lifting Parts | 263 kg | 276.3 kg ^{Note3} |
- 13. Operational Capability** Approved for VFR-flying in daytime.
- 14. Centre of Gravity Range:**
- Datum: wing leading edge at wing root
Leveling means: slope rear top fuselage 1000:29 horizontal
- | | |
|----------------|--|
| Forward Limit | 182 mm (206 mm ^{Note3}) aft of datum point |
| Rearward Limit | 305 mm (328 mm ^{Note3}) aft of datum point |
- 15. Minimum Flight Crew:** 1 (Pilot)
- 16. Maximum Seating Capacity:** 1
- 17. Lifetime limitations:** Refer to Maintenance Manual
- 18. Deflection angles of control surfaces:** Refer to Maintenance Manual

IV. Operating and Service Instructions

1. Flight Manual for the self-sustaining powered sailplane LAK-17AT, latest approved revision.

2. Maintenance Manual for the self-sustaining powered sailplane LAK-17AT, latest revision.
3. Flight Manual for the self-sustaining powered sailplane LAK-17BT, latest approved revision.
4. Maintenance Manual for the self-sustaining powered sailplane LAK-17BT, latest revision.
5. Manual for engine model SOLO 2350, issued by engine manufacturer Solo Kleinmotoren GmbH latest approved revision.
6. Operation and installation manual for propeller LAK-P4-90, issued by manufacturer JSC „Sportiné Aviacija ir KO“, latest approved revision.
7. Operating Instructions for the Tost safety tow release mechanism model “EUROPA G 88”, latest revision.

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 color surface.
3. From Serial No. 201 aircraft produced have introduced several modifications and data as given above and receive sales designation LAK-17BT.

Section 3 LAK-17B FES

I. General

2. a) **Type:** LAK-17
b) **Model:** LAK-17B FES
c) **Sales Designation**
3. **Airworthiness Category:** Powered Sailplane, CS 22 - Utility
4. **Manufacturer:** JSC „Sportinė Aviacija ir KO“
LT-59327 Prienai
Republic of Lithuania
5. **Application Date:** 19 January 2011
6. **EASA Type Certification Date:** 31 October 2014

II. Certification Basis

1. **Certification Basis:** CRI A-1, 31 October 2014
2. **Airworthiness Requirements:** CS-22, Amendment 2 published on 5 March 2009
3. **Requirements elected to comply:** Standards for Structural Substantiation
of Sailplane and Powered Sailplane
Components consisting of Glass or Carbon
Fiber Reinforced Plastics, issued July 1991
4. **Environmental Standards:** -
5. **Special Conditions:** Installation of Electric Propulsion in Sailplanes CRI E-101

Electric Engine for powered sailplanes CRI H-101
6. **Exemptions:** -

7. **Equivalent Safety Findings:** -

III. **Technical Characteristics and Operational Limitations**

1. **Type Design Definition:** List of Drawings LAK-17B FES issued 27.05.2014

2. **Description:** Single seat, mid-wing non-self launching powered sailplane, CFRP/GFRP/AFRP – construction, 2-piece wing of 18m wingspan (with winglets), double-panel Schempp-Hirth type airbrakes on upper wing surface, water ballast tanks in the wing and in the fin; CFRP/GFRP/AFRP-fuselage, retractable main wheel with hydraulic brake (BERINGER), tail wheel, T-tail (fixed horizontal stabilizer with elevator, fin and rudder).

3. **Equipment:** Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)
- 1 Altimeter
- 1 Magnetic compass
- 1 Outside air temperature indicator with sensor (when flying with water ballast)
- 1 Engine control unit featuring:
 - RPM indicator
 - Engine hour meter
 - battery level (V meter, A meter)
 - temperature indicator of motor
- 1 4-Point harness (symmetrical)
- 1 Power supply
- 1 Required placards, check list and Flight Manual

For Additional Equipment refer to Flight Manual

4. **Dimensions:** Span 18,0 m

Wing Area 10,32 m²

5. **Engine designation:** FES-LAK-M100 (accepted as part of the aircraft)
The brushless DC motor, diameter of the rotor 180 mm, motor length 100 mm, motor weight 7.3 kg.

6. **Engine Limits:** Maximum power 22 kW, 190A at 116V

Max. continuous Power 16 kW

Maximum RPM
4500 RPM

7. Propellers:

FES-LAK-P10-100 (accepted as part of the aircraft)

Type of propeller - tractor, sense of rotation- clockwise looking at direction of flight, propeller diameter 100 cm, maximum power on a propeller shaft 23 kW, maximum rotational speed 4500 RPM, propeller blade mass 0,24 kg, total service time 200 hours.

8. Fluids and Fluid capacities:

N/A

9. Launching Hooks:

Safety hook „Europa G 88“,
LBA Data sheet No. 60.230/2

Aero tow hook and/or winch/auto-tow hook optional:

10. Weak links:

Max. Ultimate Strength:

- for winch and auto tow launching

780 daN

- for aero-tow

780 daN

11. Air Speeds:

Manoeuvring Speed V_A 190 km/h

Never Exceed Speed V_{NE} 275 km/h

Maximum permitted speeds

- with flaps at +1, +2, L 190 km/h

- with flaps at -1, 0 275 km/h

- in rough air V_{RA} 190 km/h

- in aero-tow V_T 160 km/h

- in winch-launch V_W 140 km/h

- with power plant extended	V_W	160 km/h
- for extending power plant	V_{POmin}	80 km/h
- for retracting power plant	V_{POmax}	160 km/h
- for gear operating	V_{Lo}	205 km/h

- 12. Maximum Masses:**
- | | |
|--------------------------------|----------|
| Max. Mass | 600 kg |
| Max. Mass of Non-Lifting Parts | 276.3 kg |
- 13. Operational Capability** Approved for VFR-flying in daytime.
- 14. Centre of Gravity Range:**
- Datum: wing leading edge at wing root
Leveling means: slope rear top fuselage 1000:29 horizontal
- | | |
|----------------|---------------------------|
| Forward Limit | 206 mm aft of datum point |
| Rearward Limit | 328 mm aft of datum point |
- 15. Minimum Flight Crew:** 1 (Pilot)
- 16. Maximum Seating Capacity:** 1
- 17. Lifetime limitations:** Refer to Maintenance Manual
- 18. Deflection angles of control surfaces:** Refer to Maintenance Manual

IV. Operating and Service Instructions

1. Flight Manual for the self-sustaining powered sailplane LAK-17B FES, latest approved revision.
2. Maintenance Manual for the self-sustaining powered sailplane LAK-17B FES, latest revision.
3. FES-LAK-M100 motor manual, issued by engine manufacturer JSC "Sportinè aviacija ir Ko" latest approved revision.

4. FES-LAK-P10-100 propeller manual, issued by manufacturer JSC „Sportinè Aviacija ir KO“, latest approved revision.
5. Operating Instructions for the Tost safety tow release mechanism model “EUROPA G 88”, latest approved revision.

For compliance with EASA AD 2017-0167-E the sailplane has to operated and maintained in accordance with the following documents:

1. Flight Manual for the LAK-17B FES sailplane, at revision 3, or later approved revisions.
2. Maintenance Manual for the LAK-17B FES sailplane, at revision 5, or later accepted revisions.
3. FES FCU instrument manual, at version 1.80, dated 18 Dec 2017, or later EASA approved revisions issued by JSC “Sportinè aviacija ir Ko”
4. FES Battery Pack GEN2 manual, at version 1.19, dated 18 Dec 2017, or later EASA accepted revisions issued by JSC “Sportinè aviacija ir Ko”
5. FES BMS control manual, at version 1.21, dated 18 Dec 2017, or later EASA accepted revisions issued by JSC “Sportinè aviacija ir Ko”
6. FES-LAK-M100 motor manual, at version 1.41, dated 18 Dec 2017, or later EASA approved revisions issued by JSC “Sportinè aviacija ir Ko”
7. FES-LAK-P10-100 Propeller manual. at version 1.0, dated 18 Dec 2017, or later EASA approved revisions issued by JSC “Sportinè aviacija ir Ko”
8. Operating Instructions for the Tost safety tow release mechanism model “EUROPA G 88”, latest approved revision.

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 color surface.
3. Engine and propeller are accepted as part of the aircraft according Part 21.A.23(b)(2)
4. As of 22 December 2020 the model (all serials) is eligible for a standard Certificate of Airworthiness (CofA). Restricted CofA issued before that date remain valid.

Section 4 LAK-17B FES mini

I. General

2. a) Type: LAK-17
b) Model: LAK-17B FES mini
c) Sales Designation: LAK-17B FES mini
3. Airworthiness Category: Powered Sailplane, CS 22 - Utility
4. Manufacturer: JSC „Sportinė Aviacija ir KO“
LT-59327 Prienai
Republic of Lithuania
5. Application Date: 27 April 2016
6. EASA Type Certification Date: 22 December 2020

II. Certification Basis

1. Reference date for determining the applicable requirements: 27 April 2016
2. Airworthiness Requirements: CS-22, Amendment 2 published on 5 March 2009
3. Requirements elected to comply: Standards for Structural Substantiation of Sailplane and Powered Sailplane Components consisting of Glass or Carbon Fiber Reinforced Plastics, issued July 1991

Richtlinien zur Führung des Festigkeitsnachweises für Bauteile aus glasfaser- und kohlenstofffaserverstärkten Kunststoffen von Segelflugzeugen und Motorseglern, Ausgabe Juli 1991.
4. Environmental Standards: Refer to TCDSN
5. Special Conditions: Installation of Electric Propulsion in Sailplanes CRI E-101

6. **Exemptions:** -
7. **Equivalent Safety Findings:** ESF-F22.925-01 (Propeller clearance)

III. Technical Characteristics and Operational Limitations

1. **Type Design Definition:** List of Drawings LAK-17B FES mini issued 18 Dec 2020
2. **Description:** Single seat, mid-wing self launching powered sailplane, CFRP/GFRP/AFRP – construction, 13,5 m wing with winglet, double-panel Schempp-Hirth type airbrakes on upper wing surface, water ballast tanks in the wing and in the fin; CFRP/GFRP/AFRP-fuselage, retractable main wheel with hydraulic brake (BERINGER), tail wheel, T-tail (fixed horizontal stabilizer with elevator, fin and rudder).
3. **Equipment:** Min. Equipment:
- 1 Air speed indicator (up to 300 km/h)
 - 1 Altimeter
 - 1 Magnetic compass
 - 1 Outside air temperature indicator with sensor (when flying with water ballast)
 - 1 Engine control unit featuring:
 - RPM indicator
 - Engine hour meter
 - battery level (V meter, A meter)
 - temperature indicator of motor
 - 1 4-Point harness (symmetrical)
 - 1 Power supply
 - 1 Required placards, check list and Flight Manual
- For Additional Equipment refer to Flight Manual
4. **Dimensions:**
- | | |
|-----------|---------------------|
| Span | 13,5 m |
| Wing Area | 8,41 m ² |
5. **Engine designation:** FES-LAK-M100 (accepted as part of the aircraft)

The brushless DC motor, diameter of the rotor 180 mm, motor length 100 mm, motor weight 7.3 kg.

6. Engine Limits:	Maximum power	22 kW, 190A at 116V
	Max. continuous Power Maximale Dauerleistung	16 kW
	Maximum RPM Maximale Drehzahl	4500 RPM

7. Propellers:	FES-LAK-P10-100 (accepted as part of the aircraft) Type of propeller - tractor, sense of rotation- clockwise looking at direction of flight, propeller diameter 100 cm, maximum power on a propeller shaft 23 kW, maximum rotational speed 4500 RPM, propeller blade mass 0,24 kg, total service time 200 hours.
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8. Fluids and Fluid capacities:	N/A
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9. Launching Hooks:	Safety hook „Europa G 88“, LBA Data sheet No. 60.230/2
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Aero tow hook and/or winch/auto-tow hook optional:

10. Weak links:	Max. Ultimate Strength:	
	- for winch and auto tow launching	500 daN
	- for aero-tow	500 daN

11. Air Speeds:	Manoeuvring Speed	V_A	170 km/h
	Never Exceed Speed	V_{NE}	230 km/h
	Maximum permitted speeds		
	- with flaps at	+1, +2, L	170 km/h
	- with flaps at	-1, 0	230 km/h
	- in rough air	V_{RA}	170 km/h
	- in aero-tow	V_T	160 km/h
	- in winch-launch	V_W	140 km/h

	- for engine operation	V_{PE}	160 km/h
	- min. speed for engine start	V_{POmin}	80 km/h
	- max. speed for engine start	V_{POmax}	160 km/h
	- for gear operating	V_{LO}	170 km/h
12. Maximum Masses:	Max. Mass		350 kg
	Max. Mass of Non-Lifting Parts		274 kg
13. Operational Capability	Approved for VFR-flying in daytime.		
14. Launch methods:	Aero tow Winch launch and auto (car) launch Self-launch		
15. Centre of Gravity Range:	Datum: wing leading edge at wing root Leveling means: slope rear top fuselage 1000:29 horizontal		
	Forward Limit	182 mm	aft of datum point
	Rearward Limit	305 mm	aft of datum point
16. Minimum Flight Crew:	1 (Pilot)		
17. Maximum Seating Capacity:	1		
18. Lifetime limitations:	Refer to Maintenance Manual		
19. Deflection angles of control surfaces:	Refer to Maintenance Manual		

IV. Operating and Service Instructions

1. Flight Manual for the self-launching powered sailplane LAK-17B FES mini, issue 2, dated 18 December 2020, or later EASA approved revision.
2. Maintenance Manual for the self-launching powered sailplane LAK-17B FES mini, issue 2, dated 18 Dec 2020, or later EASA accepted revision.
3. Operating Instructions for the Tost safety tow release mechanism model "EUROPA G 88", latest approved revision.
4. FES FCU instrument manual, at version 1.80, dated 18 Dec 2017, or later EASA approved revisions issued by JSC "Sportinė aviacija ir Ko"
5. FES Battery Pack GEN2 manual, at version 1.19, dated 18 Dec 2017, or later EASA accepted revisions issued by JSC "Sportinė aviacija ir Ko"
6. FES BMS control manual, at version 1.21, dated 18 Dec 2017, or later EASA accepted revisions issued by JSC "Sportinė aviacija ir Ko"
7. FES-LAK-M100 motor manual, at version 1.41, dated 18 Dec 2017, or later EASA approved revisions issued by JSC "Sportinė aviacija ir Ko"
8. FES-LAK-P10-100 Propeller manual. at version 1.0, dated 18 Dec 2017, or later EASA approved revisions issued by JSC "Sportinė aviacija ir Ko"
9. Operating Instructions for the Tost safety tow release mechanism model "EUROPA G 88", latest approved revision.

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 color surface.
3. Engine and propeller are accepted as part of the aircraft according Part 21.A.23(b)(2)
4. This powered sailplane is considered as self-launchable sailplane but not as TMG i.a.w. FCL.010.

Section 5 LAK-17A mini

I. General

2. a) Type: LAK-17
b) Model: LAK-17A mini
c) Sales Designation: LAK-17A mini
3. Airworthiness Category: Powered Sailplane, CS 22 - Utility
4. Manufacturer: JSC „Sportinė Aviacija ir KO“
LT-59327 Prienai
Republic of Lithuania
5. Application Date: 26 May 2016
6. EASA Type Certification Date: 30 June 2021

II. Certification Basis

1. Reference date for determining the applicable requirements: 26 May 2016
2. Airworthiness Requirements: CS-22, Amendment 2 published on 5 March 2009
3. Requirements elected to comply: Standards for Structural Substantiation of Sailplane and Powered Sailplane Components consisting of Glass or Carbon Fiber Reinforced Plastics, issued July 1991
4. Environmental Standards: n/a
5. Special Conditions: n/a
6. Exemptions: n/a

7. **Equivalent Safety Findings:** n/a

III. **Technical Characteristics and Operational Limitations**

1. **Type Design Definition:** List of Drawings LAK-17A mini issued 18 Dec 2020

2. **Description:** Single seat, mid-wing sailplane, CFRP/GFRP/AFRP – construction, 13,5 m wing with winglet, double-panel Schempp-Hirth type airbrakes on upper wing surface, water ballast tanks in the wing and in the fin; CFRP/GFRP/AFRP-fuselage, retractable main wheel with hydraulic brake (BERINGER), tail wheel, T-tail (fixed horizontal stabilizer with elevator, fin and rudder).

3. **Equipment:** Min. Equipment:

- 1 Air speed indicator (up to 300 km/h)

- 1 Altimeter

- 1 Magnetic compass

- 1 Outside air temperature indicator with sensor
(when flying with water ballast)

- 1 4-Point harness (symmetrical)

- 1 Power supply

- 1 Required placards, check list and Flight Manual

For Additional Equipment refer to Flight Manual

4. **Dimensions:**

Span	13,5 m
Wing Area	8,41 m ²

- 5. Launching Hooks:** Safety hook „Europa G 88“,
LBA Data sheet No. 60.230/2
- Aero tow hook and/or winch/auto-tow hook optional:
- 6. Weak links:** Max. Ultimate Strength:
- for winch and auto tow launching 500 daN
- for aero-tow 500 daN
- 7. Air Speeds:**
- | | | |
|--------------------------|-----------|----------|
| Manoeuvring Speed | V_A | 170 km/h |
| Never Exceed Speed | V_{NE} | 230 km/h |
| Maximum permitted speeds | | |
| - with flaps at | +1, +2, L | 170 km/h |
| - with flaps at | -1, 0 | 230 km/h |
| - in rough air | V_{RA} | 170 km/h |
| - in aero-tow | V_T | 160 km/h |
| - in winch-launch | V_W | 140 km/h |
| - for gear operating | V_{LO} | 170 km/h |
- 8. Maximum Masses:**
- | | |
|--------------------------------|--------|
| Max. Mass | 350 kg |
| Max. Mass of Non-Lifting Parts | 274 kg |
- 9. Operational Capability** Approved for VFR-flying in daytime.
- 10. Launch methods:** Aero tow
Winch launch and auto (car) launch

- 11. Centre of Gravity Range:** Datum: wing leading edge at wing root
Leveling means: slope rear top fuselage 1000:29 horizontal
- Forward Limit 182 mm aft of datum point
- Rearward Limit 305 mm aft of datum point
- 12. Minimum Flight Crew:** 1 (Pilot)
- 13. Maximum Seating Capacity:** 1
- 14. Lifetime limitations:** Refer to Maintenance Manual
- 15. Deflection angles of control surfaces:** Refer to Maintenance Manual

IV. Operating and Service Instructions

1. Flight Manual for the LAK-17A mini sailplane, issue 1, dated 02 July 2020, or later EASA approved revision.
2. Maintenance Manual for the LAK-17A mini, issue 1, dated 09 July 2020, or later EASA accepted revision.
3. Operating Instructions for the Tost safety tow release mechanism model "EUROPA G 88", latest approved revision.

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 color surface.

Section 6 Administration

I. Acronyms and Abbreviations

Acronym / Abbreviation	Definition
AFRP	Aramid Fibre Reinforced Plastic
CFRP	Carbon Fibre Reinforced Plastic
GFRP	Glass Fibre Reinforced Plastic
CS	Certification Specification
CAA	Civil Aviation Authority
EASA	European Union Aviation Safety Agency
FES	Front Electric Sustainer
g	Load Factor
kg	Kilogram
L	Litres
LBA	Luftfahrt-Bundesamt
min	Minute
RPM	Revolutions per minute
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCH	Type Certificate Holder
VFR	Visual Flight Rules

II. Type Certificate Holder Record

TCH Record	Period
JSC "Sportinė Aviacija ir KO" Pociūnai LT-59327 Prienai Republic of Lithuania	Present. No changes.

III. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	13 Apr 2022	This data sheet supersedes EASA.A.083. All technical data as per EASA.A.083 Issue 9 with no changes. Editorial changes (EASA Issue 7), introduction of model LAK-17A mini (EASA Issue 8) and editorial corrections (EASA Issue 9)	Issue 1 13 Apr 2022

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