TYPE-CERTIFICATE

DATA SHEET

NO. EASA.A.115

for
EM-11 ORKA

Type Certificate Holder
Type Certificate Holder
Secint Air Support Poland sp. z.o.o.

CEGIELNIANA STR. 4A/15
30-404 KRAKÓW PL Malopolskie

For models: EM-11C ORKA

The Type Certificate EASA.A.038 has been issued by EASA in accordance with Regulation (EU) No 2018/1139, in particular Article 77 1 (e) thereof and Regulation (EU) No 748/2012 Annex 1b.

CONTENT

SECTION A: EM-11C ORKA

ADMINISTRATIVE SECTION

SECTION A: EM-11C ORKA

A.I. General

1. a) Type:	EM-11 ORKA	
b) Model:	EM-11C ORKA	
2. Airworthiness Category:	Normal	
3. Certification Process	Regulation (EU) No 748/2012 – Annex Ib	
4. Manufacturer:	ZAKŁADY LOTNICZE MARGAŃSKI&MYSŁOWSKI S. A. ul. Strażacka 60, 43-300 Bielsko-Biała, Poland	
5. Certification Application Date:	Original Application Extension Application	17 February 2005 31 March 2008
6. Type Certification Date	8 April 2011	

A.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	30 March 2005
2. Airworthiness Requirements:	CS-23 Initial Issue
3. Special Conditions:	F-01 HIRF protection
4. Exemptions:	None
5. Deviations:	None
6. Equivalent Safety Findings:	None
7. Requirements elected to comply:	None
8. Environmental Standards:	Refer to TCDSN EASA.A.115

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Master Drawing List, Doc. No. D2-KS-01.F, latest issue

2. Description: Twin engine, four-seated, cantilever high wing airplane, composite construction, retractable tricycle landing gear, T-tail.

3. Equipment: Equipment List, Doc. No. D2-OE-01.E, latest issue

4. Dimensions:

Span	13,5 m	44,3 ft
Length	8,705 m	28,6 ft
Height	2,585 m	8,5 ft
Wing area	16,5 m^2	177,2 sqft

5. Engine:

5.1.1 Model:	Textron Lycoming LIO-320-B1A	Textron Lycoming IO-320-B1A
5.1.2 Type Certificate:	TCDS US 1E12	
5.1.3 Limitations:	Max take-off rotational speed	2700 r.p.m.
	Max continuous rotational speed	2700 r.p.m.
	For power plants limits refer to AFM	

6. Load factors:

Flaps 0°	+3,8 / -1,52
Flaps 20°	+2,0 / 0.0
Flaps 30°	+2,0 / 0.0

7. Propeller:

7.1 Model:	MTV-12-C-C-F/CFRD183-119d	MTV-12-C-C-F/CFLD183-119d	
7.2 Type Certificate:	TCDS No EASA.P.013,		
7.3 Number of blades:	Three		
7.4 Diameter:	Maximum Diameter	1830 mm (72,05 in)	
	Minimum Diameter	1780 mm (70,08 in)	
7.5 Sense of Rotation:	Clockwise	Counter-Clockwise	

8. Fluids:

8.1 Fuel:	AVGAS 100LL
8.2 Oil:	Oils conforming to spec. MIL-L-22851 / SAEJ1899 For more detail refer to AFM Doc. No. D2-OL-11.A-PL, Section 1, latest issue.
8.3 Coolant:	None

9. Fluid capacities:

9.1 Fuel:	Total:	2x200 liters	(2x52,8 U.S. Gallons)
	Usable:	2x176 liters	(2x46,5 U.S. Gallons)
9.2 Oil:	Maximum:	2x7,6 liters	(2x8 U.S. Quarts)
	Minimum:	2x1,9 liters	(2x2 U.S. Quarts)
9.3 Coolant system capacity:	None		

10. Air Speeds:

Design manoeuvring speed V_A	130 KEAS
Maximum flap extended speed V_{FE}	115 KEAS
Maximum landing gear operating speed V_{LO}	105 KEAS
Maximum landing gear extended speed V_{LE}	105 KEAS
Minimum control speed V_{MC}	70 KEAS
Never exceed speed V_{NE}	194 KEAS
Maximum structural cruising speed V_{NO}	156 KEAS

11. Maximum Operating Altitude:

3048 m (10000 ft)	without time limits
from 3048 m to 3962 m (from10000 to 13000 ft)	maximum 30 minutes without oxygen use.

12. Operations Capability: Day/Night VFR.
Flight into known icing conditions not permitted.

13. Maximum Weights:

Take-off	1820 kg	(4012 lb)
Landing	1820 kg	(4012 lb)
Zero fuel	1780 kg	(3924 lb)

14. Centre of Gravity Range:

Forward limit:
3,631 m (142,96 in) equivalent to 23,5% of MAC, aft of DATUM at 1820 kg (4012 lb)
3,637 m (143,18 in) equivalent to 23,9% of MAC, aft of DATUM at 1710 kg (3773 lb)
3,689 m (145,25 in) equivalent to 28,0% of MAC, aft of DATUM at 1490 kg (3285 lb)
3,773 m (148,55 in) equivalent to 34,4% of MAC, aft of DATUM at 1380 kg (3042 lb)
Vary linearly with mass in between

Rear limit:
3,781 m (148,86 in) equivalent to 35,0% of MAC, aft of DATUM at 1820 kg (4012 lb)
3, 807 m (149,89 in) equivalent to 37,0% of MAC, aft of DATUM at 1600 kg (3527 lb)
3,807 m (149,89 in) equivalent to 37,0% of MAC, aft of DATUM at 1380 kg (3042 lb)
Vary linearly with mass in between

15. Datum:	3,200 m (10,5 ft) in front of leading edge at 0,700 m (27,6 in) station	
16. Reserved		
17. Levelling Means:	Wing chord at aileron outboard station	
18. Minimum Flight Crew:	1	
19. Maximum Passenger Seating Capacity:	3	
20. Baggage/Cargo Compartments:	Max. allowable load	70 kg (154 lb)
	Location	4,10 m (13,45 ft) aft of DATUM.
21. Wheels and Tyres:	Nose wheel tyre size	5.00-5
	Main wheel tyre size	6.00-6
22. (Reserved):		

A.IV. Operating and Service Instructions

Flight Manual:	Doc. No. D2-OL-11.A-PL dated 30 December 2009, latest issue
Maintenance Manual (incl. Airworthiness Limitations):	Doc. No. D2-OM-11.A-PL dated 30 May 2009, latest issue
Service Information and Service Bulletins	-

A.V. Notes:

None

ADMINISTRATIVE SECTION

I. Acronyms

MAC	Mean Aerodynamic Chord
S/N	Aircraft Serial Number
VFR	Visual Flight Rules
TCDSN	Type Certificate Data Sheet for Noise

II. Type Certificate Holder Record

ZAKŁADY LOTNICZE Margański & Mysłowski S.A.
ul. Strażacka 60
43-300 Bielsko-Biała
POLAND

As of 13 December 2024
Secint Air Support Poland sp. z.o.o.
CEGIELNIANA STR. 4A/15
30-404 KRAKÓW PL Malopolskie
Poland

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
01	8 April 2011	Initial issue	8 April 2011
02	13 December 2024	TC transfer to Secint Air Support Poland	13 December 2024