

## TYPE CERTIFICATE

**EASA.A.113**

This Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EU) No. 748/2012 to

### **AEROCLUBUL ROMANIEI**

**LASCAR CATARGIU NR. 54  
010673 BUCURESTI  
ROMANIA**

and certifies that the product type design listed below complies with the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified on the associated:

Type Certificate Data Sheet Number: EASA.A.113

#### **Type Design - Model:**

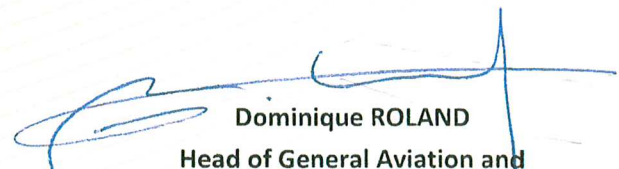
IAR-46(S) - IAR-46  
IAR-46(S) - IAR-46S

#### **Date of Issue:**

25 November 1999  
08 December 2000

**For the European Aviation Safety Agency**

**Date of Issue: 31 October 2016**



**Dominique ROLAND**  
**Head of General Aviation and**  
**Remotely Piloted Aircraft Systems (RPAS)**

TYPE CERTIFICATE - 10026205 - AEROCLUBUL ROMANIEI - 307908





**EASA**

**TYPE-CERTIFICATE  
DATA SHEET**

**EASA.A.113**

**IAR-46 / -46S**

Type Certificate Holder:

Aeroclubul Romaniei  
Bd.Lascar Catargiu, Nr.54, cod: 010673  
Sector 1, Bucharest  
Romania

Models: IAR-46  
IAR-46S

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### Change Record

<b>Issue</b>	<b>Date</b>	<b>Changes</b>
01	2 January 2007	Initial release, transfer from Romanian TCDS
02	24 October 2016	TC transfer



### **III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: Document No. 46A-00-0000.02/06,  
current issue
2. Description: IAR-46 is a single reciprocating engine  
aeroplane, a two-seater of a conventional  
design. The landing gear is semiretractable,  
with steerable tail wheel.
3. Equipment: The basic required equipment as prescribed in the  
applicable airworthiness requirements must be  
installed in the aeroplane for certification.
4. Dimensions:

Wing Span	11.420 m
Total Length	7.850 m
Maximum Height	2.150 m
Wing Area	13.870 m <sup>2</sup>
Mean aerodynamic chord	1.237 m
5. Engine/s:

No.	1
Model:	Rotax 912 F3
Type Certificate:	TW9 – ACG issued by AUSTRO CONTROL (Austria)

  - 5.1 Engine Limits:

Maximum Take off Power	59.6 kW/5800 RPM (max. 5 min.)
Maximum Continuous Power	58 kW/5500 RPM
6. (Reserved)
7. Propeller/s:

No.	1
Model	Hoffmann HO-V352F-/170FQ
Type Certificate	LBA 32.130/88
Number of blades	2
Diameter:	1700 mm
Sense of Rotation	clockwise
8. Fluids:
  - 8.1 Fuel: EUROSUPER RON unleaded according to EN  
228 or AVGAS 100 LL.
  - 8.2 Oil: any registered brand engine oil for the  
automotive market (see AFM)
  - 8.3 Coolant: see Rotax Operator's Manual for Rotax 912,  
P/N 899 370
9. Fluid capacities:
  - 9.1 Fuel:

Total:	70 liters
Usable:	68 liters
  - 9.2 Oil:

Maximum:	3.0 liters
Minimum:	2.0 liters

10. Air Speeds:	
Design Manoeuvring Speed $V_A$	176 km/h IAS
Maximum Flap Extended Speed $V_{FE}$	140 km/h IAS
Maximum structural cruising speed $V_{NO}$	190 km/h IAS
Never exceed speed $V_{NE}$	279 km/h IAS
11. (Reserved)	
12. Operational:	VFR Day Flight into expected or actual icing conditions is prohibited.
13. Maximum Masses:	
Take-off	750 kg
14. Centre of Gravity Range:	19.57 – 30.47 % MAC
15. Datum:	leading edge of MAC
16. (Reserved)	
17. Levelling Means:	
Longitudinal axis:	painted points A and C on fuselage side
Lateral axis:	painted points No. 7 on left and right wing
18. Minimum Flight Crew:	1 (Pilot)
19. Maximum Passenger Seating Capacity:	1
20. (Reserved)	
21. Baggage / Cargo Compartments	N/A
22. Wheels and Tyres	
Main wheel:	MATCO W51L
Dimensions :	5.00 X 5"
Tail wheel dimensions :	210 x 65 mm
23. Serial numbers eligible	02 and subsequent

#### **IV. Operating and Service Instructions**

Airplane Flight Manual (AFM)	46A-04-0025
Airplane Maintenance Manual (AMM) (incl. Airworthiness Limitations)	46A-04-0026

#### **V. Notes**

**Note 1** Current weight and balance data, loading information and a list of equipment included in empty weight must be provided for each aeroplane at the time of original certification.

**Note 2** All placards required in the approved AFM must be installed in the appropriate location.

## **SECTION 2: IAR-46S**

### **I. General**

- |   |   |                       |
|---|---|-----------------------|
| Data Sheet No.: EASA.A.113  | Issue: 01   | Date: January 2, 2006 |
| 1. a) Type:   | IAR-46  |                       |
| b) Variant:   | IAR-46S   |                       |
| 2. Airworthiness Category:  | Very Light Aeroplane  |                       |
| 3. Type Certificate Holder:   | Aeroclubul Romaniei<br>Bd.Lascar Catargiu, Nr.54, cod: 010673<br>Sector 1, Bucharest<br>Romania   |                       |
| 4. Manufacturer:  | S.C. Constructii Aeronautice S.A.<br>Str. Aeroportului nr. 1<br>507075 Ghimbav, Brasov<br>ROMANIA |                       |
| 5. Certification Application Date:  | November 30, 1999   |                       |
| 6. Romanian CAA Certification Date:   | December 08, 2000   |                       |
| 7. The EASA Type Certificate replaces the Romanian CAA Type Certificate No. AM-25 |   |                       |

### **II. Certification Basis**

- |  |   |
|--|---|
| 1. Reference Date for determining the applicable requirements: | December, 1996  |
| 2. (Reserved)  |   |
| 3. (Reserved)  |   |
| 4. Certification Basis:  | As defined in FPC A-1, latest Issue   |
| 5. Airworthiness Requirements:                                 | JAR-VLA, issued April 26, 1990, including amendments VLA/91/1, dated October 22, 1991 and VLA/92/1, dated January 1, 1992 |
| 6. Requirements elected to comply:                             | None  |
| 7. EASA Special Conditions:                                    | Induction System Icing Protection (see FPC A-5)<br>Firewalls (see FPC A-6)  |
| 8. EASA Exemptions:  | None  |
| 9. EASA Equivalent Safety Findings:                            |   |
| JAR-VLA 683  | 46.C.001 Control System Elasticity (see FPC D-3)  |
| JAR-VLA 731(a)   | 46.D.001 Wheel approval (see FPC D-1)   |
| JAR-VLA 777 (e),(f)  |   |
| 779 (a)(2), (b)(2)   | 46.D.002 Flaps and Landing Gear Cockpit Controls Location (see FPC D-2)   |
| 10. EASA Environmental Standards:                              | Noise: ICAO Annex 16, Volume I, Chapter 10, Third Edition – July 1993, Amdt. 6, November 4, 1999<br>Emission: N/A         |

### **III. Technical Characteristics and Operational Limitations**

1. Type Design Definition: Document No. 46A-00-0000.07,  
current issue
2. Description: IAR-46S is the same as IAR-46, except the  
type and installation of the propulsion system.
3. Equipment: The basic required equipment as prescribed in the  
applicable airworthiness requirements must be  
installed in the aeroplane for certification.
4. Dimensions:

Wing Span	11.420 m
Total Length	7.850 m
Maximum Height	2.150 m
Wing Area	13.870 m <sup>2</sup>
Mean aerodynamic chord	1.237 m
5. Engine/s:

No.	1
Model:	Rotax 912 S3
Type Certificate:	TW9 – ACG issued by AUSTRO CONTROL (Austria)

  - 5.1 Engine Limits:

Maximum Take off Power	73.5 kW/5800 RPM (max. 5 min.)
Maximum Continuous Power	69 kW/5500 RPM
6. (Reserved)
7. Propeller/s:

No.	1
Model	Hoffmann HO-V352F-/170FQ+6
Type Certificate	LBA 32.130/88
Number of blades	2
Diameter:	1760 mm
Sense of Rotation	clockwise
10. Fluids:
  - 8.1 Fuel: EUROSUPER RON unleaded according to EN  
228 or AVGAS 100 LL.
  - 8.2 Oil: any registered brand engine oil for the  
automotive market (see AFM)
  - 8.3 Coolant: see Rotax Operator's Manual for Rotax 912,  
P/N 899 370
11. Fluid capacities:

9.1 Fuel:	Total: 70 liters
	Usable: 68 liters
9.2 Oil:	Maximum: 3.0 liters
	Minimum: 2.0 liters



10. Air Speeds:	
Design Manoeuvring Speed $V_A$	176 km/h IAS
Maximum Flap Extended Speed $V_{FE}$	140 km/h IAS
Maximum structural cruising speed $V_{NO}$	190 km/h IAS
Never exceed speed $V_{NE}$	279 km/h IAS
11. (Reserved)	
12. Operational:	VFR Day Flight into expected or actual icing conditions is prohibited.
13. Maximum Masses:	
Take-off	750 kg
15. Centre of Gravity Range:	19.57 – 30.47 % MAC
15. Datum:	leading edge of MAC
16. (Reserved)	
18. Levelling Means:	
Longitudinal axis:	painted points A and C on fuselage side
Lateral axis:	painted points No. 7 on left and right wing
18. Minimum Flight Crew:	1 (Pilot)
19. Maximum Passenger Seating Capacity:	1
20. (Reserved)	
21. Baggage / Cargo Compartments	N/A
22. Wheels and Tyres	
Main wheel:	MATCO W51L
Dimensions :	5.00 X 5"
Tail wheel dimensions :	210 x 65 mm
23. Serial numbers eligible	03 and subsequent

#### **IV. Operating and Service Instructions**

Airplane Flight Manual (AFM)	46A-04-0030
Airplane Maintenance Manual (AMM) (incl. Airworthiness Limitations)	46A-04-0035

#### **V. Notes**

**Note 1** Current weight and balance data, loading information and a list of equipment included in empty weight must be provided for each aeroplane at the time of original certification.

**Note 2** All placards required in the approved AFM must be installed in the appropriate location.