



**TYPE-CERTIFICATE
DATA SHEET**

EASA.A.670

for

SKY ARROW 600 Sport

**Type Certificate Holder:
Magnaghi Aeronautica S.p.A.**

Via Galileo Ferraris, 76
80142 Napoli
ITALIA

For models: Sky Arrow 600 Sport



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SECTION A: SKY ARROW 600 SPORT

A.I. General

Data Sheet No : EASA.A.670	Issue 01, 02 August 2019
1. 1.1 Type:	Sky Arrow 600 Sport
1.2 Model:	Sky Arrow 600 Sport
2. Airworthiness Category:	Normal
3. Manufacturer:	Magnaghi Aeronautica S.p.A. Via Galileo Ferraris, 76 80142 Napoli ITALIA
4. EASA Type Certification Application Date:	08 March 2013
5. State of Design Authority:	not applicable
6. State of Design Authority Type Certification Date:	not applicable
7. EASA Type certification Date:	02 August 2019



A.II. EASA Certification Basis

- | | | |
|----|---|---|
| 1. | Reference Date for determining the applicable requirements: | 02 September 2016 |
| 2. | Airworthiness Requirements: | CS-LSA Amendment 1, dated 29 July 2013 |
| 3. | Special Conditions: | None |
| 4. | Exemptions | None |
| 5. | (Reserved) Deviations | None |
| 6. | Equivalent Safety Findings: | None |
| 7. | Environmental Protection | ICAO Annex16, Volume 1 (For further details see TCDSN EASA.A.670) |

D.III. Technical Characteristics and Operational Limitations

1. Type Design Definition

See Doc n° NT-17-2019 Sky Arrow "Sky Arrow EASA CS-LSA Type design Report" latest issue and NT-18-2019 Sky Arrow "Sky Arrow EASA CS-LSA Design Data Report" latest issue.

2. Description:

The Sky Arrow is a tandem seat aircraft, almost entirely made of carbon fiber in epoxy resin. It is characterized by: single engine, fixed pitch pushing propeller, high wing with strut and T-tail.

The Sky Arrow 600 Sport variants have a fixed tricycle landing gear.



3. Equipment: The prescribed basic equipment required by applicable airworthiness regulations must be installed on the aircraft. For Equipment List: AFM Section 6

4. Dimensions:

Span	9.68 m	(31.76 ft)
Length	7.60 m	(24.93 ft)
Height	2.56 m	(8.40 ft)
Wing Area	13.55 m ²	(145.85 sqft)

5. Engine:

No. 1 Rotax 912 S2
Certification basis: FAR 33 Amdt. 15
Type Certificate: TCDS EASA.E.121
Engine Limits: Max take-off power – 5 min.:
73.5 KW (98 HP) at 5800 RPM
Max continuous power:
69.0 KW (92 HP) at 5500 RPM

6. Load factor

	Flap Up	At V _A	At V _{NE}	Flap in T/o and Landing Position
Max. Positive	4.0	4.0	4.0	2.0
Max. Negative	-2.0	-2.0	-2.0	0.0

7. Propeller:

Wood propeller, twin bladed, fixed pitch:

No. 1 HOFFMANN p/n HO17GHM-174 177CLD Certification basis: FAR 35
Type Certificate N° L-32 110/1 issued by LBA
Diameter:
Max 174.5 cm (68.70 in)
Min 173.5 cm (68.31 in)
Blade Angle @ 75% R 23°

8. Fluids:

8.1 Fuel:

MOGAS min RON 95 (see note 4)

8.2 Oil:

see applicable Aircraft Flight Manual

8.3 Coolant:

Conventional coolant based on Ethylene glycol with 50 % water content



9. Fluid Capacities

9.1	Fuel:	Total:	112.0 liters
		Usable:	92 liters
9.2	Oil:	Total:	3.0 liters
		Minimum:	2.0 liters
9.3	Coolant:	Total:	2.3 liters
		Minimum:	2.2 liters

10. Air Speeds:

Never exceed speed V_{NE} :

Sky Arrow 600 Sport 129 KIAS

Maximum structural cruising speed V_{NO}

Sky Arrow 600 Sport 103 KIAS

Design maneuvering Speed V_A :

Sky Arrow 600 Sport 89 KIAS

Flap Extended Speed V_{FE} :

Sky Arrow 600 Sport 67 KIAS

Maximum Landing Gear Speed V_{LE} :

Sky Arrow 600 Sport N/A

Maximum Landing Gear Operation Speed V_{LO} :

Sky Arrow 600 Sport N/A

11. Maximum Operating Altitude:

13500 ft

12. Approved Operations Capability:

Day-VFR only

Flight into expected or actual icing conditions
is prohibited



13. Maximum Masses:

Take-off: 599 kg (1320 lb)
Landing: 599 kg (1320 lb)

14. Centre of Gravity Range:

Forward limit: 24.5% MAC 2.82 m @599kg
Rear limit: 35.0% MAC 2.97 m @599kg
38.0% MAC 3.012 m @550kg
Linear variation for intermediate Weights

15. Datum:

2.48 m (97.6 in) before MAC Leading Edge

16. Control Surface Deflections

Aileron (Left/Right)	Up: $20^{\circ} \pm 2^{\circ}$ Down: $14^{\circ} \pm 2^{\circ}$
Elevator	Up: $22^{\circ} \pm 2^{\circ}$ Down: $14^{\circ} \pm 2^{\circ}$
Rudder	Left: $23^{\circ} \pm 2^{\circ}$ Down: $23^{\circ} \pm 2$
Elevator Trim	Up: $22^{\circ} \pm 2^{\circ}$ Down: $9^{\circ} \pm 2^{\circ}$

17. Levelling Means:

Floor Levelled, see Section 6 of AFM

18. Minimum Flight Crew:

1 (Pilot)

19. Maximum Passenger Seating Capacity:

1

20. Baggage / Cargo Compartments

2

- 1) Under Rear Seat 30 kg (66 lb) max @ 2.60 m (102.2 in) behind Datum
- 2) Behind Rear Seat 15 kg (33 lb) max @ 3.04 m (119.6 in) behind datum

21. Wheels and Tyres

Nose Wheel Tyre Size

3.50-4"

Main Wheel Tyres Size

5.00-5

6 Ply

22. (Reserved)



A.IV. Operating and Service Instructions

1. Airplane Flight Manual (AFM)

Sky Arrow model	Document n°	Affected s/n
Sky Arrow 600 Sport	AFM-01-2019-SKY ARROW	LSA030 and following

2. Airplane Maintenance Manual (AMM) (incl. Airworthiness Limitations)

Sky Arrow model	Document n°	Affected s/n
Sky Arrow 600 Sport	AMM-01-2019-SKY ARROW	LSA030 and following

Engine Manuals:

Maintenance Manual
Operators Manual
Propeller Manual:

Maintenance Manual for Rotax Engine 912 series
Operators Manual for Rotax 912 series
Operation and Maintenance Manual No. E 0110.74

- | | |
|--------------------------------|-----------------------------|
| 3. Structural Repair Manual | Included in the AMM |
| 4. Weight and Balance Manual | Included in the AFM and AMM |
| 5. Illustrated Parts Catalogue | Document JV-14.41 |



A.V. Notes

1. When applying for the airworthiness certificate an updated Weight and Balance report must be issued, listing the equipment part of the empty weight
2. All placards specified in the applicable Aircraft Flight Manual must be displayed in the aircraft at the appropriate location
3. All external surfaces exposed to sunlight must be white, with the exception of the tail numbers and the factory livery
4. AVGAS 100LL can be used as alternate fuel in accordance to Chapter 2 of the applicable Aircraft Flight Manual.



SECTION ADMINISTRATIVE

I. Acronyms & Abbreviations

N/A

II. Type Certificate Holder Record

Magnaghi Aeronautica S.p.A.
Via Galileo Ferraris, 76
80142 Napoli
ITALIA

III. Change Record

Issue	Date	Changes	TC Issue No. & Date
Issue 01	Issue 01, 02 August 2019	Initial Issue	issue 01, 02 August 2019

