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

1. Type: Sky Arrow 600 Sport
   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


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:

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Span</td>
<td>9.68 m</td>
<td>(31.76 ft)</td>
</tr>
<tr>
<td>Length</td>
<td>7.60 m</td>
<td>(24.93 ft)</td>
</tr>
<tr>
<td>Height</td>
<td>2.56 m</td>
<td>(8.40 ft)</td>
</tr>
<tr>
<td>Wing Area</td>
<td>13.55 m²</td>
<td>(145.85 sqft)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Flap Up</th>
<th>At Vₐ</th>
<th>At Vₐₑ</th>
<th>Flap in T/o and Landing Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Max. Positive</td>
<td>4.0</td>
<td>4.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Max. Negative</td>
<td>-2.0</td>
<td>-2.0</td>
<td>-2.0</td>
</tr>
</tbody>
</table>

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°±2°
Down: 14°±2°

Elevator
Up: 22°±2°
Down: 14°±2°

Rudder
Left: 23°±2°
Down: 23°±2°

Elevator Trim
Up: 22°±2°
Down: 9°±2°

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)

<table>
<thead>
<tr>
<th>Sky Arrow model</th>
<th>Document n°</th>
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Engine Manuals:
- Maintenance Manual
- Operators Manual

5. Illustrated Parts Catalogue
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

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<tbody>
<tr>
<td>Issue 01</td>
<td>Issue 01, 02 August 2019</td>
<td>Initial Issue</td>
<td>issue 01, 02 August 2019</td>
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