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1.1 Introduction

This POH contains information required to be furnished to the pilot by the CS-LSA regulation, ASTM F 2746-09 and supplementary information provided by the TC holder – EVEKTOR, spol. s r.o.

The pilot is obliged to become familiar with all content of this Manual including supplements located in Section 9.

1.2 Certification Basis

This airplane meets following ASTM standards:

- F2245-10c Design and Performance of a Light Sport Airplane
- F2483-05 Maintenance and the Development of Maintenance Manuals for Light Sport Aircraft
- F2746-09 Standard Specification for Pilot's Operating Handbook (POH) for Light Sport Airplane
- F2339-06 Design & Manufacture of Reciprocating Spark Ignition Engines
- F2506-07 Design and Testing of Fixed-Pitch or Ground Adjustable Propellers
- F2538-07a Design & Manufacture of Reciprocating Compression Ignition Engines
- F2316-08 Airframe Emergency Parachutes for Light Sport Aircraft

This type of airplane was approved by the European Aviation Safety Agency (EASA) in accordance with the CS-LSA regulation.

Type certificate Number: EASA.A.592

Date: 24.5.2012

Basis of Noise Certificate: ICAO Annex 16, Volume 1

1.3 Airplane Manufacturer

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1.4 Descriptive Data

1.4.1 Airplane Description

SportStar RTC airplane is a low-wing with two side by side seats and nose wheel landing gear. Airplane structure is a metal with high portion of composite materials used.

For further description see Section 7 - Airplane & System Description.

1.4.2 Power Plant

The standard power plant consists of ROTAX 912 ULS engine and WOODCOMP Klassic 170/3/R propeller.

For further description see Section 7 - Airplane & System Description.

1.4.3 Main Technical Data

Wing

Span.....	8.646 m
Area	10.6 sq.m
MAC depth	1.25 m
Wing loading	56.60 kg/sq.m
Aileron – area.....	0.25 sq.m
Flap – area.....	0.52 sq.m

Fuselage

Length	5.980 m
Width.....	1.082 m
Height.....	2.476 m
Cockpit canopy max. width	1.180 m

Horizontal tail units

Span.....	2.50 m
HTU area	1.95 sq.m
Elevator area.....	0.80 sq.m

**Vertical tail units**

Height.....	1.39 m
VTU area	1.05 sq.m
Rudder area	0,43 sq.m

Landing gear

Wheel track	1.95 m
Wheel base	1.35 m
Main and nose landing gear wheel diameter	380 mm



1.4.4 Three View Drawing

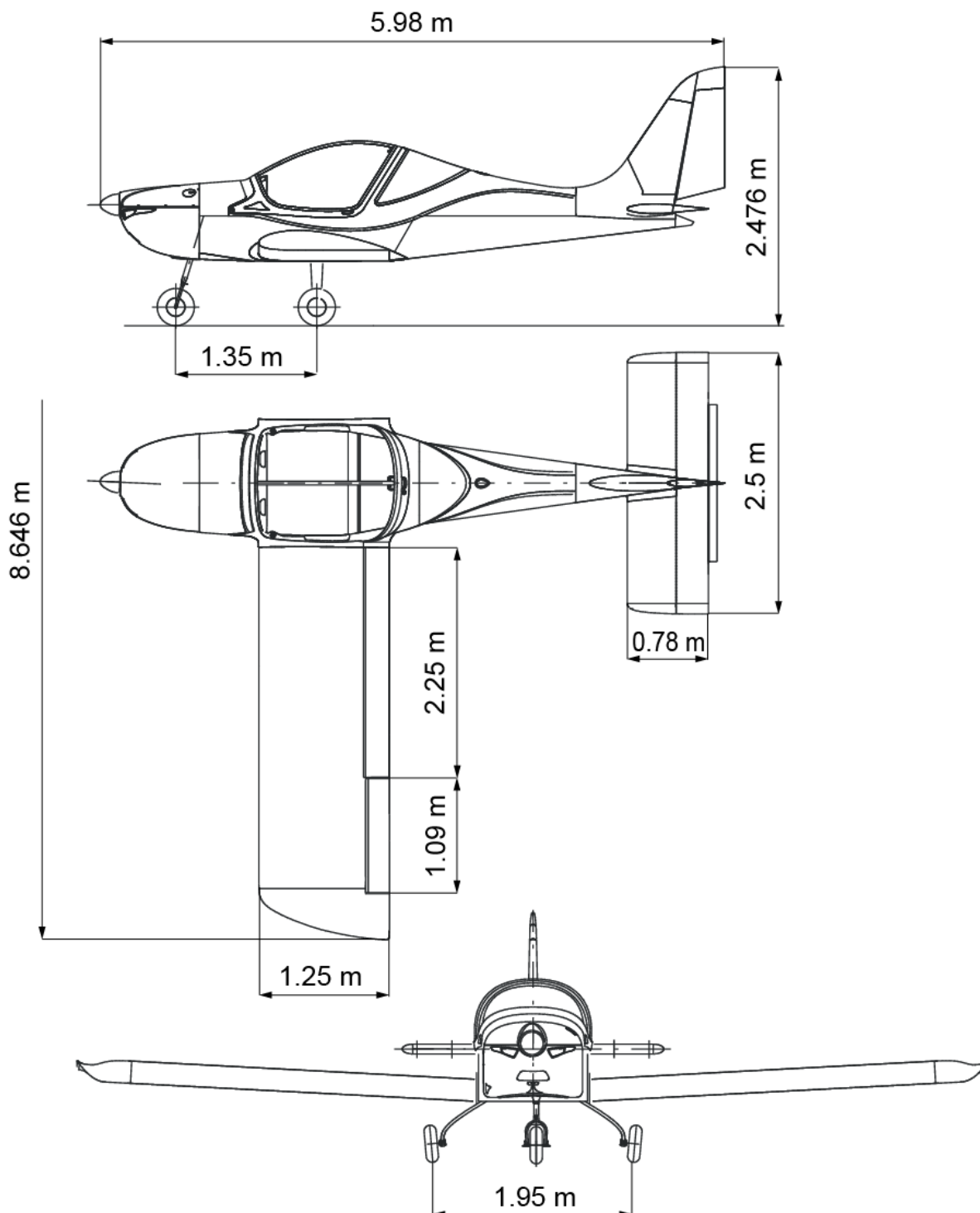


Figure 1-1



1.5 Airplane Performance Specifications

1.6 Weight

Maximum take-off weight..... 600 kg

1.7 Airspeeds and Performance

Top speed (0 ft ISA, MTP)..... 114 KIAS (212 km/h IAS)

Cruise speed (2000 ft ISA, 75% MCP)..... 92 KIAS (171 km/h IAS)

Maximum range (2000 ft ISA, 75% MCP)..... 1180 km

Best rate-of-climb speed V_Y :

- Flaps retracted – 0° 65 KIAS (120 km/h IAS)
- Flaps in take-off position – 15° 61 KIAS (113 km/h IAS)

Best angle-of-climb speed V_X :

- Flaps retracted – 0° 49 KIAS (90 km/h IAS)
- Flaps in take-off position – 15° 48 KIAS (88 km/h IAS)

Stall speeds in horizontal flight:

- Flaps retracted – 0° 42 KIAS (78 km/h IAS)
- Flaps in take-off position – 15° 41 KIAS (76 km/h IAS)
- Flaps in landing position I – 30° 40 KIAS (75 km/h IAS)
- Flaps in landing position II – 50° 39 KIAS (73 km/h IAS)

1.8 Fuel

Total fuel capacity 120 l

Total usable fuel..... 118 l

Automotive gasoline with octane index min. RON 95 (or anti-knock index min. AKI 91) meets the following standards:

- Europe – EN 228 Super, EN 228 Super plus
- Canada – CAN/CGSB-3.5 Quality 3
- USA – ASTM D4814
- Russia - R51866-2002

Aviation gasoline:

- AVGAS 100 LL aviation fuel according to ASTM D910.
- AVGAS UL91 (unleaded) aviation fuel according to ASTM D7547.



1.9 Engine

Max. take-off power (5 minutes).....73.5 kW (100 hp) at 5800 RPM

Max. continuous power69 kW (93 hp) at 5500 RPM

1.10 Definitions and Abbreviations

NOTE

The abbreviations on placards in the airplane cockpit are printed in **BOLD CAPITAL LETTERS** in the text of this Airplane Flight Manual.

ACCU	Accumulator
AKI	Anti knock index of fuel
ALT ENC	Encoding altimeter
AOA	Angle of attack
ATC	Air traffic control
bar	1 bar = 100 kPa
°C	Celsius degree
CAS	Calibrated airspeed
ELT	Emergency locator transmitter
fpm	Foot per minute
ft	Foot/feet (1 ft = 0.305 m)
GEN	Generator
GPS	Global positioning system
IAS	Indicated airspeed
IC	Intercom
IFR	Instrument flight rules
ISA	International standard atmosphere
kg	Kilogram
KIAS	Indicated airspeed in knots
km/h	Kilometers per hour
kt, kts	Knot, knots (1 kt = 1.852 km/h)
l	Liter
lb, lbs	pound/pounds (1 lb = 0.453 kg)
m	Meter
MAC	Mean aerodynamic chord



max.	Maximum
MCP	Maximum continuous power
min.	Minimum / minute
mm	Millimeter
m/s	Meter per second
MTP	Maximum take-off power
nm	Nautical mile (1 nm = 1.852 km)
OAT	Outside air temperature
OFF	System is switched off or control element is in off position
ON	System is switched on or control element is in on position
Pa	Pascal (1 Pa = 1 N/sq.m)
PSI	Pound per sq.in (1 PSI = 6.89 kPa)
POH	Pilot's Operating Handbook
RON	Research octane number
RPM	Revolutions per minute
RWY	Runway
sq.ft	Foot squared
sq.in	Inch squared
sq.m	Meter squared
U.S. gall	U.S. gallons (1 U.S. gall = 3.785 l)
V _A	Maneuvering speed
V _C	Design cruising speed
V _{FE}	Maxim flap extended speed
VFR	Visibility flight rules
V-METER	Voltmeter
V _{NE}	Never exceed speed
V _{NO}	Maximum structural cruising speed
V _{S0}	Stall speed with flaps in 50° position
V _{S1}	Stall speed with flaps in 0° position
VTU	Vertical tail units
V _X	Best angle of climb speed
V _Y	Best rate of climb speed
XPDR	Transponder



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