Supplement no. S03

E-Props 3 Blades– Fixed Pitch Propeller

Record of Revisions

Rev	Revised page	Description of Revision
0	-	First Issue

List of Effective Pages

	Page	Revision
Cover pages	All	*Rev.0*
Section 1	All	*Rev 0*
Section 2	All	*Rev 0*
Section 3	All	*Rev 0*
Section 4	All	*Rev 0*
Section 5	All	*Rev 0*
Section 6	All	*Rev 0*
Section 7	All	*Rev 0*
Section 8	All	*Rev 0*

INDEX

INTRODUCTION

This section contains supplemental information to operate the aircraft in a safe and efficient manner when equipped with E-Props DUR-3-170-C4-T Fixed Pitch Propeller.

It is the owner's responsibility to replace the mentioned pages in accordance with the instructions herein addressed section by section.

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Supplement S02: pages replacement instructions

SECTION 1 – GENERAL

According A/C configuration apply following pages replacement:

Supplement S02 pages		Basic AFM pages
SEPFPP1-5	**REPLACES**	1-5

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3 GENERAL FEATURES

3.1 CONTROL SURFACES TRAVEL LIMITS

The control surfaces travel limits are reported in the Aircraft Maintenace Manual.

3.2 ENGINE

Manufacturer	Bombardier Rotax GmbH
Model	912 ULS2
Engine type	4 cylinder horizontally-opposed twins with overall displacement of 1352 c.c., mixed cooling, (water-cooled heads and air-cooled cylinders), twin carburetors, integrated reduction gear with torque damper.
Maximum power (at declared rpm)	73.5kW (98.5hp) @5800rpm (max.5') 69.0kW (92.5hp) @5500rpm (cont.)

3.3 PROPELLER

Manufacturer	E-Props
Model	DUR-3-170-C4-T
Number of blades	3
Diameter	1700 mm (no reduction permitted)
Type	Fixed - ground adjustable pitch
Reduction ratio (crank to propeller shaft)	2.43:1

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Supplement S02: pages replacement instructions

SECTION 2 – LIMITATIONS

According A/C configuration apply following pages replacement:

Supplement S02 pages		Basic AFM pages
SEPFPP2-7	**REPLACES**	2-7

7 PROPELLER

Manufacturer	E-Props
Model	DUR-3-170-C4-T
Number of blades	3
Diameter	1730 mm (No Reduction Permitted)
Type	Fixed - ground adjustable pitch

SECTION 3 – EMERGENCY PROCEDURES

Refer to the basic AFM, Section 3 – EMERGENCY PROCEDURES

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SECTION 4 – NORMAL PROCEDURES

Refer to the basic AFM, Section 4 – NORMAL PROCEDURES

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Supplement S02: pages replacement instructions

SECTION 5 – PERFORMANCE

According A/C configuration apply following pages replacement:

Supplement S02 pages		**Basic AFM pages**
SEPFPP5-9 THRU 10	**REPLACES**	5-9 THRU 10

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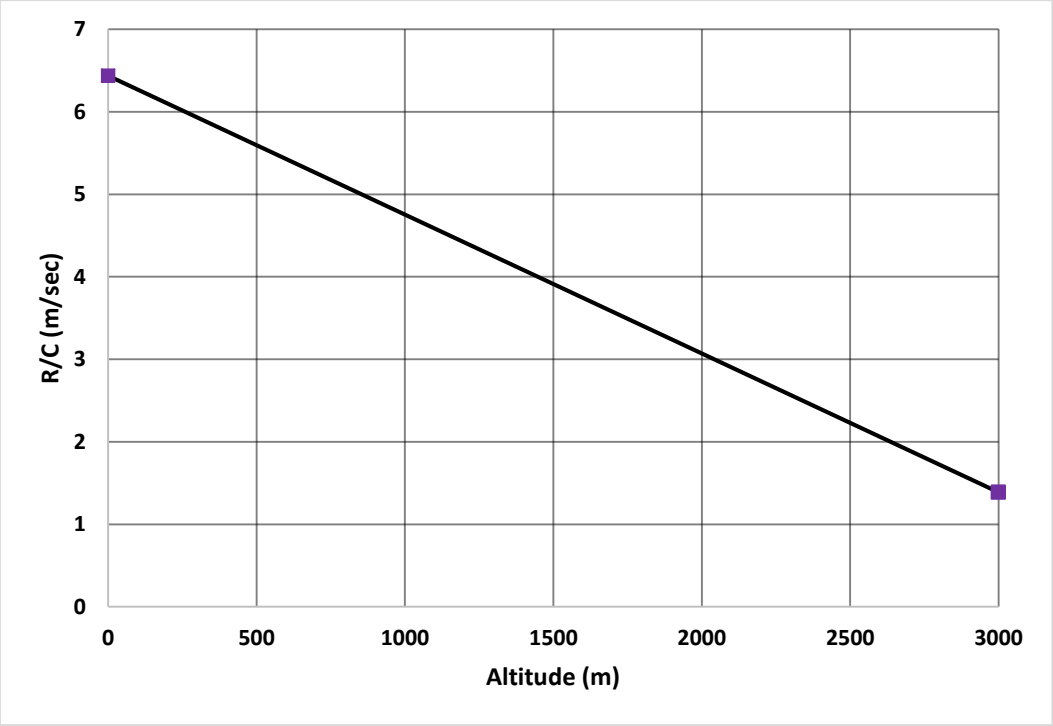
7 RATE OF CLIMB

CLIMB RATE IN CLEAN CONFIGURATION

CONDITIONS:

- ISA
- Flaps: 0°
- Weight 450 kg
- Engine: full throttle



V_Y = 120 km/h / 65 kts IAS

8 CRUISE PERFORMANCE

Pressure altitude H_P: **2000** *ft* *OAT: +13°C*

Engine RPM	Speed TAS [km/h]	Speed TAS [kts]	Consumption (lt/h)
4300	152	82	14
4800	180	97	18
5200	198	107	21

Pressure altitude H_P: **4000** *ft* *OAT: +11°C*

Engine RPM	Speed TAS [km/h]	Speed TAS [kts]	Consumption (lt/h)
4300	156	84	14
4800	183	99	18
5200	202	109	21

SECTION 6 – WEIGHT AND BALANCE

Refer to the basic AFM, Section 6 – WEIGHT AND BALANCE

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Supplement S02: pages replacement instructions

SECTION 7 – AIRFRAME AND SYSTEMS DESCRIPTION

According A/C configuration apply following pages replacement:

Supplement S02 pages		**Basic AFM pages**
SEPFPP7 - 12	**REPLACES**	7-12

7. POWERPLANT

7.1. ENGINE

P92 Echo MkII is equipped with a Rotax 912 ULS 2 100 horse powered engine.

Fig. 7-14. Rotax 912 ULS 2 engine

The main engine characteristics are:

- 4 stroke, 4 cylinders. horizontally opposed, spark ignition engine, single central camshaft hydraulic tappets - push rods – OHV;
- Liquid cooled cylinder heads;
- Ram air cooled cylinders;
- Dry sump forced lubrication;
- Dual ignition of breakerless, capacitor discharge design;
- 2 constant depression carburettors;
- Mechanical fuel pumps;
- Electric starter 12 V 0.9 kW;
- Integrated AC generator with external rectifier regulator;
- Propeller drive via integrated gearbox with mechanical shock absorber and overload clutch.

7.2 PROPELLER

P92 Echo MkII is equipped with a E-Props 3 blades propeller. The model is DUR-3-170-C4-T, with fixed- ground adjustable pitch. The diameter is 1700 mm.

SECTION 8 – AIRCRAFT CARE AND MAINTENANCE

Refer to the basic AFM, Section 8 – AIRCRAFT CARE AND MAINTENANCE