

0.2 LIST OF EFFECTIVE PAGES

Page	Revision	Date	Page	Revision	Date
0-1	00	12.12.2013	5-1	00	12.12.2013
0-2	01	18.12.2014	5-2	00	12.12.2013
0-3	00	12.12.2013	5-3	00	12.12.2013
0-4	01	18.12.2014	5-4	00	12.12.2013
0-5	00	12.12.2013			
0-6	00	12.12.2013	6-1	00	12.12.2013
			6-2	00	12.12.2013
1-1	00	12.12.2013	6-3	00	12.12.2013
1-2	00	12.12.2013	6-4	00	12.12.2013
1-3	00	12.12.2013	6-4	00	12.12.2013
1-4	00	12.12.2013			
1-5	00	12.12.2013	7-1	00	12.12.2013
			7-2	00	12.12.2013
2-1	00	12.12.2013	7-3	00	12.12.2013
2-2	00	12.12.2013	7-4	00	12.12.2013
2-3	01	18.12.2014	7-5	00	12.12.2013
2-4	00	12.12.2013	7-6	00	12.12.2013
2-5	01	18.12.2014	7-7	00	12.12.2013
2-6	00	12.12.2013	7-8	00	12.12.2013
2-7	00	12.12.2013	7-9	00	12.12.2013
2-8	01	18.12.2014	7-10	00	12.12.2013
			7-11	00	12.12.2013
3-1	00	12.12.2013	7-12	00	12.12.2013
3-2	00	12.12.2013	7-13	00	12.12.2013
3-3	00	12.12.2013			
3-4	00	12.12.2013	8-1	00	12.12.2013
3-5	00	12.12.2013	8-2	00	12.12.2013
3-6	00	12.12.2013	8-3	00	12.12.2013
3-7	00	12.12.2013	8-4	00	12.12.2013
			8-5	00	12.12.2013
4-1	00	12.12.2013	8-6	00	12.12.2013
4-2	00	12.12.2013	8-7	01	18.12.2014
4-3	00	12.12.2013			
4-4	00	12.12.2013	9-1	00	12.12.2013
4-5	00	12.12.2013	9-2	00	12.12.2013
4-6	00	12.12.2013			
4-7	00	12.12.2013	10-1	00	12.12.2013
4-8	00	12.12.2013	10-2	00	12.12.2013
4-9	00	12.12.2013			
4-10	00	12.12.2013			
4-11	01	18.12.2014			
4-12	00	12.12.2013			
4-13	00	12.12.2013			
4-14	00	12.12.2013			

2.3. Airspeed indicator markings

Airspeed indicator markings and their colour code significance are shown below:

Colour code significance	Airspeed		Significance
	IAS	KIAS	
White arc	76 - 146	41 - 79	Operating range with extended flaps. (Lower limit is v_{S0} . Upper limit is v_{FE} .)
Green arc	89 - 225	48 - 121	Normal operating range. (Lower limit is v_S . Upper limit is v_C .)
Yellow arc	225 - 276	121 - 149	Manoeuvres must be conducted with caution. (Lower limit is v_C . Upper limit is v_{NE} .)
Red line	276	149	Never exceeded speed v_{NE}

2.4. Powerplant

Engine		
Engine manufacturer	-	BRP-Powertrain GmbH, Austria
Engine model	-	ROTAX 912 ULS
Maximum power	Takeoff (<i>max. 5 min.</i>)	73,5 kW / 100 hp
	Continuous	69,0 kW / 94 hp
Maximum RPM	Takeoff (<i>max. 5 min.</i>)	5800 min ⁻¹
	Continuous	5500 min ⁻¹
Coolant temperature	Maximum	120 °C
Cylinder head coolant temperature	Maximum	120 °C
Oil temperature	Minimum	50 °C
	Normal	90-110 °C
	Maximum	130 °C
Oil pressure	Minimum	0,8 bar / 12 psi
	Normal	2,0-5,0 bar / 29-73 psi
	Maximum	7 bar / 102 psi
Fuel pressure	Minimum	0,15 bar / 2,18 psi
	Normal	0,25 bar / 3,63 psi
	Maximum	0,50 bar / 7,25 psi
Oil consumption	Maximum	0,06 l/h

2.5. Powerplant instrument markings

Digital powerplant instrument SkyView SV D1000 for monitoring of engine parameters complemented with analogue engine speed indicator and fuel pressure are marked with following colour code significance:

Digital instrument (Dynon SV-D1000)	Unit	Red Line Minimum Limit	Green Arc Normal Operating	Yellow Arc Caution Range	Red Line Maximum Limit
Tachometer	RPM	1400	1400 - 5500	5500 - 5800	5800
Manifold pressure	inHg	-	0,0 - 28,0	28,0 - 29,5	29,5
Coolant temperature	°C	50	90 – 110	50 – 90 110 – 120	120
Cylinder head coolant temperature	°C	50	90 – 110	50 – 90 110 – 120	120
Oil temperature	°C	50	90 - 110	50 - 90 110 - 130	130
Oil pressure	bar	0,8	2,0 - 5,0	0,8 - 2,0 5,0 - 7,0	7,0
Exhaust gas temperature	°C	250	300-800	250-300 800-880	880
Fuel pressure	bar	0,15	0,15 - 0,50	-	0,50
Fuel flow meter	l/h	-	0,0 - 25,0	-	over 25,0
Fuel level	l	Red light annunciator will be illuminated with the remaining 7 litres of fuel in the fuel tank.			

2.6. Miscellaneous instrument markings

No additional miscellaneous instruments.

2.14. Maximum passenger seating

The maximum number of passenger aboard is one passenger sitting in the right seat in the cockpit.

2.15. Other limitations

(a) Wind speed

The maximum demonstrated crosswind velocity for takeoff and landing is 12,4 m/s (24 knots).

(b) Smoking

No smoking on board the aircraft.

(c) Minimum equipment for flight operation:

- 1 Airspeed indicator.
- 2 Sensitive barometric altimeter.
- 3 Magnetic compass.
- 4 SkyView SV D1000 with following indications:
 - a. Fuel quantity indication
 - b. Engine RPM indication
 - c. Oil temperature indication
 - d. Oil pressure indication
 - e. Cylinder head coolant temperature indication
- 5 Safety harness for each occupied seat.

2.16. Limitations placards

AIRSPEEDS:	
V _{NE}	276 km/h
V _A	184 km/h
V _{FE}	146 km/h
V _{SO}	76 km/h

AIRSPEEDS:	
V _{NE}	149 kts
V _A	99 kts
V _{FE}	79 kts
V _{SO}	41 kts

WARNING IFR flights and flights in icing conditions are prohibited!	WARNING Aerobatic manoeuvres and intentional spins are prohibited!
APPROVED FOR: DAY - VFR	WARNING Do not exceed maximum take-off weight: 600 kg / 1320 lbs
NO SMOKING	



Note: this placard is in two pieces (one for each section of baggage compartment)

4.5.5. Before takeoff

- | | |
|-----------------------------|-----------------------------|
| 1. Control stick: | Freedom of movement. |
| 2. Elevator trim control: | Set neutral position. |
| 3. Wing flaps: | Set takeoff position. |
| 4. Fuel selector: | Set LEFT. |
| 5. Fuel pump: | Switch ON. |
| 6. Powerplant instrument: | Check for correct readings. |
| 7. Flight instrument: | Check altimeter setting. |
| 8. Seat and safety harness: | Adjust and lock. |
| 9. Canopy of cockpit: | Latched and locked. |
| 10. Landing lights: | Switch ON. |

4.5.6. Normal takeoff

- | | |
|-----------------------------|--|
| 1. Throttle lever: | Full open. |
| 2. Control stick: | Set into neutral position. |
| 3. Direction on the ground: | Control by rudder pedals. |
| 4. Unstick: | At speed at 90-95 km/h (49-51 kts) (according to takeoff weight). |
| 5. Accelerating: | Accelerate to speed 120-130 km/h (65-70 kts) (acceleration after unstick). |
| 6. Fuel pump: | Should be switched OFF after takeoff in safety altitude 150 m. |
| 7. Landing lights: | Switch OFF. |
| 8. Throttle lever: | Throttle lever to max. continue power. |
| 9. Flaps retracting: | At height 50 m AGL retract the wing flaps. |

4.5.7. Climbing

Normal climb conducts at a climb speeds 130-140 km/h (70-76 kts) in accordance with the takeoff weight of the airplane. Monitor cylinder head coolant temperature and oil pressure during climb. Oil temperature limits must not be exceeded. In the case of high readings, increase airspeed and reduce engine power setting.

8.7. Winter operation

Pre-flight inspection:

In addition during the pre-flight inspection in winter operation must be done:

- Remove the ice from the airplane surfaces.
- Check control surfaces free movement and cleanness of slots of control surfaces and flaps.
- Check cleanness of the fuel tank venting.
- During winter operation on the frozen or harden surface of the runway is recommended to remove the wheel fairings to avoid of their damages by accumulated snow and ice.

Engine and oil pre-heating:

There is possible to start an engine without need of pre-heating if outside temperature is not below +5 °C. It is recommended to pre-heat the engine and oil if temperature falls below +5 °C. Use suitable air heater or a dryer.

Blow the hot air from the front into the hole around the propeller hub. Temperature of hot air should not exceed 100 °C. Pre-heat until cylinder head coolant temperature and oil temperature exceed +20 °C.

Parking and taxiing:

Check wheel brakes for freezing when parking outside and temperature is below 0 °C. Check wheels free rotation prior to taxiing (hold a propeller and tow the airplane). Heat the brakes with the hot air to remove ice. Do not remove the ice by braking during taxiing!

WARNING

Never use open fire to pre-heat an engine!

CAUTION

If cylinder heads coolant and oil temperatures fall during parking among flights than is recommended to start and warm up engine from time to time. Do not open choke when starting hot engine!