

## INTRODUCTION

With the AQUILA AT01 you have acquired a very efficient training and utility aircraft, which is easy to operate and exhibits excellent handling qualities.

To ensure reliable operation and trouble free flight, we recommend that you read this Pilot's Operating Handbook thoroughly and adhere to the operating instructions and recommendations given herein.

<b>CAUTION</b>
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*All limitations, procedures and performance data contained in this handbook are EASA/FAA approved and mandatory. Failing to follow the procedures and limits set forth in this handbook can lead to a loss of liability by the manufacturer.*

## THE HANDBOOK

The handbook is presented in loose-leaf form to ease the substitution of revisions and is sized in A5-format for convenient storage in the aircraft.

Tab dividers throughout the handbook allow quick reference to each section. A Table of Contents is located at the beginning of each section to aid the location of specific data within that section.

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\* - partially approved

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## LIST OF REVISIONS

All revisions to the handbook, with the exception of individual weight and balance data and revisions to the Equipment List, must be recorded in the List of Revisions. Revisions must either be approved by the EASA or, in the case of editorial changes, in accordance with Part 21A.263(c)(4) by the Design Organization of AQUILA Aviation GmbH.

Additions and revisions to text in an existing section will be identified by a vertical black line adjacent to the applicable revised area. A new issue code appears in the footer of the revised pages.

If revisions are distributed, the applicable sections are to be exchanged with the updated version. Generally only complete sections of the POH will be exchanged and not individual pages.

The operation of the AQUILA AT01 is only permitted with a current and up to date POH carried on board. Please refer to the following web page whenever the revision status of your POH is in question.

[www.aquila-aviation.de](http://www.aquila-aviation.de)

Issue	Description of Revision	Revised Section(s)	EASA Approval-number	Approval by AQUILA / EASA Date / Signature
A.01	First Issue	All	10045115	29.05.2013
A.02	Editorial changes, Supplements 8,33 kHz FAA certification	All		15.10.2013
A.03	AS-00 „Winter Operation“	0, 9		08.04.2014
A.04	Editorial changes	0, 4		19.10.2015

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POH / AFM  
AQUILA AT01-100C

Section 0

Revision A.04 of AFM ref. FM-AT01-1010-103 is approved under the authority of DOA ref. EASA.21J.025.

19.10.2015  
AQUILA Aviation GmbH  
AQUILA  
Head of  
Airworthiness  
**Date, Signature Office of Airworthiness**

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## PURCHASE OF TECHNICAL PUBLICATIONS

To guarantee safe operation and correct maintenance of the AQUILA AT01-100 aircraft, all manuals and technical publications must be kept in the current effective status.

All manuals and technical publications relating to the aircraft AQUILA AT01-100 are available from the companies listed below:

### (a) **AQUILA AT01-100C related Manuals and Publications**

AQUILA Aviation GmbH  
OT Schönhagen  
Flugplatz  
D-14959 Trebbin

Tel: ++49 (0)33731-707-0  
Fax: ++49 (0)33731-707-11  
E-Mail: kontakt@aquila-aviation.de  
Internet: <http://www.aquila-aviation.de>

### (b) **Engine ROTAX 912 S related Manuals and Publications**

Contact the ROTAX® authorized distributor for ROTAX® Aircraft Engines of the applicable distribution area.

For contact details of the local authorized distributor for ROTAX Aircraft Engines, please refer to chapter 13 of the ROTAX® Operator's Manual for 912 S Engines.

### (c) **Propeller MTV-21 related Manuals and Publications**

mt-Propeller Entwicklung GmbH  
Flugplatz Straubing-Wallmühle  
D-94348 ATTING

Tel: ++49 (0)9429-9409-0  
Fax: ++49 (0)9429-8432  
Internet: [www.mt-propeller.com](http://www.mt-propeller.com)  
E-Mail: [sales@mt-propeller.com](mailto:sales@mt-propeller.com)

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## SECTION 4

### NORMAL PROCEDURES

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## 4.1 INTRODUCTION

This section provides normal operating procedures and checklists for the aircraft as well as recommended airspeeds.

Additional information is provided in the current issues of the Operators Manual for ROTAX® engine Type 912 series and the Operation and Installation Manual of mt-Propeller® ATA 61-01-024.

Normal procedures associated with optional equipment can be found in Section 9.

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## 4.2 AIRSPEEDS FOR NORMAL OPERATION

The following airspeeds are based on the maximum take-off weight of 1653 lbs (750 kg). They may also be used for any lower operational weight.

<b>TAKE-OFF</b>		
Airspeed (IAS)		kts
Normal climb speed to 50 Feet (Flaps <b>T/O</b> )		57
Best rate of climb speed at sea level (Flaps <b>UP</b> )	$V_Y$	65
Best angle of climb speed at sea level (Flaps <b>T/O</b> )	$V_X$	52

<b>LANDING</b>		
Airspeed (IAS)		kts
Final approach speed for landing (Flaps <b>LDG</b> )		60
Balked landing (Flaps <b>LDG</b> )		60
Maximum demonstrated crosswind component for take-off or landing		15
Maximum airspeed with Flaps <b>LDG</b>	$V_{FE}$	90

<b>CRUISE</b>		
Airspeed (IAS)		kts
Maneuvering speed	$V_A$	112
Maximum Turbulent Air Operating Speed	$V_{NO}$	130

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### 4.3 DAILY INSPECTION

<b>CAUTION</b>
----------------

*The daily inspection is begun by checking all 3 fuel sumps for water and contamination. This must be done **before** the aircraft is moved. Otherwise the fuel in the sump may mix.*

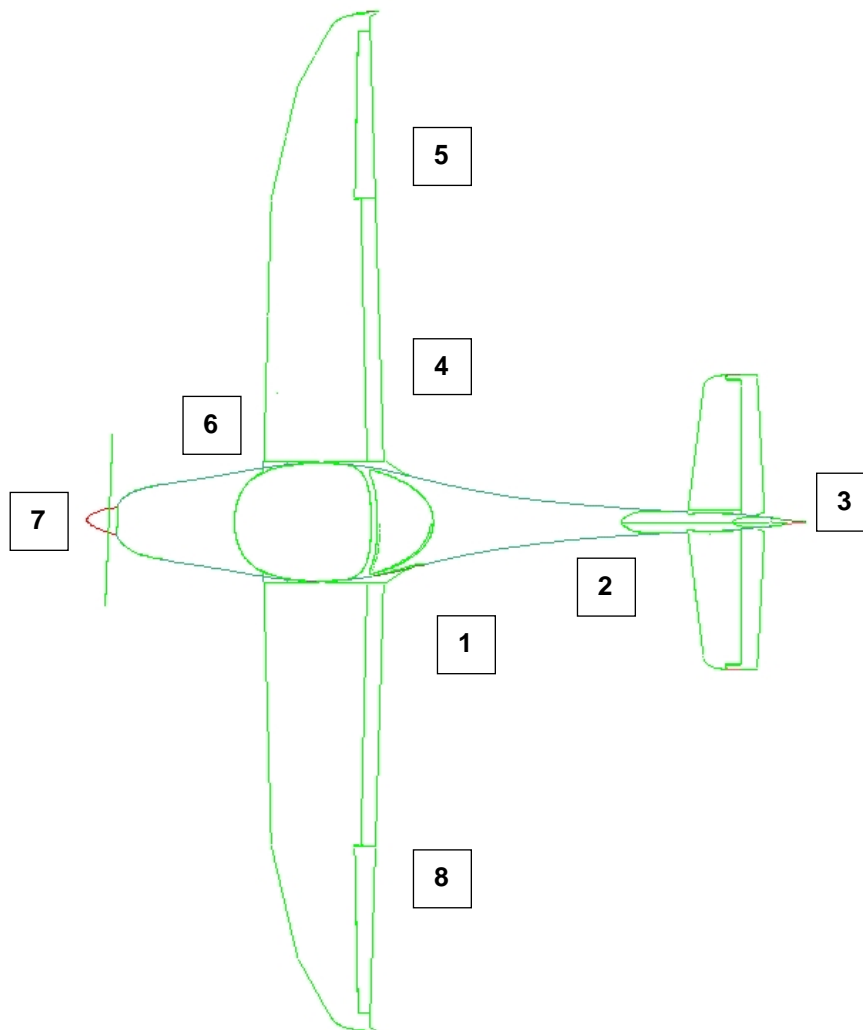
- |    |                                |  |
|----|--------------------------------|--|
| 1. | Tank drain (left / right wing) | drain and visually inspect for contamination |
| 2. | Electrical fuel pump drain     | drain and visually inspect for contamination |

#### A) CABIN

- |     |                              |                                  |
|-----|------------------------------|----------------------------------|
| 1.  | Aircraft Documentation       | CHECK on board                   |
| 2.  | Ignition key                 | REMOVED                          |
| 3.  | <b>ALT1/ BAT</b> switch      | ON                               |
| 4.  | Annunciator (warning lights) | Press <b>TEST</b> ; check all ON |
| 5.  | <b>ALT1</b> switch           | OFF                              |
| 6.  | Engine instruments           | CHECK                            |
| 7.  | Fuel quantity                | CHECK                            |
| 8.  | <b>Nav Lights</b> switch     | ON, CHECK, OFF                   |
| 9.  | <b>Landing Light</b> switch  | ON, CHECK, OFF                   |
| 10. | <b>BAT</b> switch            | OFF                              |
| 11. | ELT                          | CHECK operational                |
| 12. | Foreign objects              | CHECK and REMOVE, when necessary |
| 13. | Baggage                      | STOWED and SECURED               |
| 14. | Canopy                       | CHECK condition and cleanliness  |

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B) EXTERIOR CHECK, Visual Inspection



**CAUTION**

*In this manual, visual inspection means the following:  
Inspect for mechanical damage, dirt, cracks, delamination, excessive play, looseness,  
leaks, incorrect attachment, foreign objects and general condition.*

*Control surfaces: in addition, check for free movement.*

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1. Left main landing gear
  - a) Landing gear strut Visual inspection
  - b) Wheel fairing Visual inspection (refer to 7.11.4)
  - c) Tire pressure and slip marking CHECK
  - d) Tire, wheel, brake Visual inspection
  - e) Chocks (if in use) REMOVE
  
2. Fuselage
  - a) Fuselage shell Visual inspection
  - b) Skid plate Visual inspection
  - c) Tail tie-down DISCONNECT
  
3. Empennage
  - a) Elevator Visual inspection
  - b) Horizontal stabilizer Visual inspection
  - c) Rudder Visual inspection,  
CHECK: fitting and bolt  
connection, proper control cable  
connection and safe-tied.
  - d) Vertical stabilizer Visual inspection
  
4. Right main landing gear
  - a) Landing gear strut Visual inspection
  - b) Wheel Fairing Visual inspection (refer to 7.11.4)
  - c) Tire pressure and slip marking CHECK
  - d) Tire, wheel, brake Visual inspection
  - e) Chocks (if in use) REMOVE
  
5. Right wing
  - a) Entire wing surface (upper and under side) Visual inspection
  - b) Fuel vent CHECK if clear
  - c) Flap Visual inspection
  - d) Aileron and inspection window Visual inspection
  - e) Wing tip, NAV lights and ACL Visual inspection
  - f) Fuel level CHECK with dipstick (see inner  
surface of baggage compartment  
door) and verify with the indicated  
fuel level on the fuel gauge cockpit
  - g) Fuel tank filler cap CHECK if closed
  - h) Wing tie-down DISCONNECT

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6. Nose section, cowling

**WARNING**

*Before cranking the propeller:  
Ignition and **ALT1/BAT** switch: OFF  
Set the parking brake.*

**WARNING**

**RISK OF BURNS !**  
*Only check the oil and coolant levels when the engine is cool.*

- a) Check oil level      Turn the propeller several times in the **direction of engine rotation** to pump oil from the engine back into the oil tank.

**CAUTION**

**NEVER** turn the propeller against the direction of engine rotation.

Stop turning the propeller when air begins to return to the oil tank. This is indicated by the sound of air rushing from the open oil tank.

Use the oil dip stick to check that the oil level is between the -min./max.- markings. The difference between -min./max.- is approximately 0.48 US Quarts (0.45 l).

**CAUTION**

*The oil specification in Section 1.9.1 must be adhered to!*

- b) Check coolant level: Verify coolant level in the **expansion tank** and replenish as required. (The expansion tank must be at least 2/3 filled or coolant has to be visible at the gauge glass.)

Verify coolant level in the **overflow bottle** and replenish as required. (The coolant level must be between the min. and max. markings.)

**CAUTION**

*The coolant specification in Section 1.9.2 must be adhered to!*

- c) Air Intakes                      CHECK if clear  
d) Cooler intake                    CHECK if free from obstructions  
e) Cowling                            Visual Inspection; CHECK Camloc fasteners  
f) Propeller and Spinner           Visual inspection

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- g) Propeller blades CHECK for cracks and other damage
7. Nose landing gear
- a) Nose gear strut Visual inspection
- b) Wheel fairing Visual inspection

**CAUTION**

*Both parts of the 2 piece nose wheel fairing must always be installed on the aircraft*

- c) Tire pressure and slip marking CHECK
- d) Tire, wheel Visual inspection
- e) Shock absorber unit Visual inspection
- f) Chocks and tow bar REMOVE
8. Left wing
- a) Entire wing surface (upper and under side) Visual inspection
- b) Fuel vent CHECK if clear
- c) **BAT** switch ON
- d) Stall warning press to upper detent, warning tone is audible
- e) **BAT** switch OFF
- f) Pitot / Static tube REMOVE cover, CHECK if all openings are clear
- g) Wing tip, NAV lights and ACL Visual inspection
- h) Aileron and inspection window Visual inspection
- i) Cooler cover (if installed) Visual inspection
- j) Fuel level CHECK with dipstick and verify with the indicated fuel level on the fuel gauge
- k) Fuel tank filler cap CHECK if closed
- l) Flap Visual inspection
- m) Wing tie-down DISCONNECT

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#### 4.4 PRE-FLIGHT INSPECTION (Walk Around)

1. Daily Inspection Confirm has been carried out.
2. Tow bar Remove
3. Fuel level CHECK with dipstick and verify with the indicated fuel level on the fuel gauge

**WARNING**

*Before cranking the propeller:  
Ignition and **ALT1/BAT** switch: OFF,  
Set the parking brake.*

**WARNING**

*RISK OF BURNS !  
Only check the oil and coolant levels when the engine is cool !*

4. Check oil level Turn the propeller several times in the direction of engine rotation to pump oil from the engine back into the oil tank.  
  
Stop turning the propeller when air begins to return to the oil tank. This is indicated by the sound of air rushing from the open oil tank.  
  
Use the oil dip stick to check that the oil level is between the min. and max. markings. The difference between min. and max. is approx. 0.48 US Quarts (0.45 l).

**CAUTION**

*The oil specification in Section 1.9.1 must be adhered to !*

5. Check Coolant Level Verify coolant level in the overflow bottle and replenish as required. (The coolant level must be between the min. and max. markings)

**CAUTION**

*The coolant specification in Section 1.9.2 must be adhered to !*

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- |                             |  |
|-----------------------------|--|
| 6. Tie-down straps          | remove   |
| 7. Baggage door             | CHECK if closed and locked   |
| 8. Pitot cover              | remove   |
| 9. Control locks            | remove   |
| 10. Seating position        | adjust and lock, check that nose wheel steering and brakes can be operated |
| 11. Carburetor heat         | CHECK for free movement, then PUSH (OFF)                                   |
| 12. Cabin heat              | CHECK for free movement, then PUSH (OFF)                                   |
| 13. Choke                   | CHECK for free movement and automatic reset                                |
| 14. Throttle                | CHECK for free movement, then set IDLE                                     |
| 15. Propeller Control Lever | CHECK for free movement, then set in START Position                        |
| 16. Weight and balance      | within limits?   |

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## 4.5 CHECKLISTS FOR NORMAL PROCEDURES

### 4.5.1 Before Engine Start-up

- |     |                                 |  |
|-----|---------------------------------|--|
| 1.  | Daily and Pre-Flight Inspection | COMPLETED  |
| 2.  | Passenger Briefing              | COMPLETED  |
| 3.  | Seats                           | ADJUSTED   |
| 4.  | Seat Belts and Harnesses        | FASTENED   |
| 5.  | Canopy                          | CLOSED and LOCKED<br>Check locking mechanism                       |
| 6.  | Parking Brake                   | SET (pull lever back)  |
| 7.  | Control column                  | CHECK for free movement and<br>correct control surface deflections |
| 8.  | Fuel Selector Valve             | LEFT or RIGHT  |
| 9.  | Carburetor Heat                 | PRESS  |
| 10. | Throttle                        | IDLE   |
| 11. | Propeller Control Lever         | START position   |
| 12. | <b>Avionics</b> Switch          | OFF  |
| 13. | <b>P/S Heat</b> (if installed)  | OFF  |
| 14. | Circuit Breakers                | CHECK all set  |

<b>NOTE</b>
-------------

*Cage the Attitude Indicator (if installed) before switching **ALT1/BAT** on.*

- |     |                          |    |
|-----|--------------------------|----|
| 15. | <b>ALT1 / BAT</b> switch | ON |
|-----|--------------------------|----|

<b>NOTE</b>
-------------

*Pay attention to messages that may appear on the PFD and MFD displays while the system is loading.*

*The attitude indicators (AHRS module and stand-by indicator) require several minutes to stabilize. Pay attention to information on the Garmin G500 display.*

- |     |  |             |
|-----|--|-------------|
| 16. | <b>ALT 1</b> warning light                   | ILLUMINATES |
| 17. | <b>ENG</b> warning light                     | ILLUMINATES |
| 18. | <b>P/S-HEAT</b> warning light (if installed) | ILLUMINATES |
| 19. | <b>ACL</b> switch                            | ON          |

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**4.5.2 Engine Start-up**

- |    |                         |               |                              |
|----|-------------------------|---------------|------------------------------|
| 1. | <b>Fuel Pump</b> switch |               | ON                           |
| 2. | Fuel Pressure           |               | within GREEN range           |
| 3. | Throttle                | - Cold Engine | IDLE                         |
|    |                         | - Hot Engine  | 0.8 in. (2 cm) OPENED        |
| 4. | Choke                   | - Cold Engine | PULL, and keep pulled        |
|    |                         | - Hot Engine  | RELEASE (automatic reset)    |
| 5. | Brakes                  |               | PRESS both pedals            |
| 6. | Propeller area          |               | CLEAR                        |
| 7. | Ignition switch         |               | START, then BOTH             |
| 8. | Oil Pressure            |               | CHECK, if oil pressure rises |

**CAUTION**

*The oil pressure has to show rising values within 10 seconds after engine start, otherwise shut down the engine immediately!*

**NOTE**

*The starter may not be operated for more than 10 seconds at a time. Allow the starter to cool off for at least 2 minutes between attempts.*

- |     |                            |     |
|-----|----------------------------|-----|
| 9.  | <b>ALT 1</b> warning light | OFF |
| 10. | <b>Fuel Pump</b> switch    | OFF |

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### 4.5.3 Before Taxiing

<b>CAUTION</b>
----------------

*Warm up the engine for approx. 2 min at 800 RPM and then at 1000 RPM until the Oil Temperature reaches a temperature of at least 122°F (50°C)*

- |    |                                 |     |
|----|---------------------------------|-----|
| 1. | Avionics switch                 | ON  |
| 2. | Avionics and flight instruments | SET |

The GARMIN G500 has an integrated sensor that automatically adjusts the brightness of the display.

It is also possible to adjust the brightness of the display manually. Using the large knob of the MFD change to the AUX page. Use the small knob to adjust the brightness. When finished press the ENT button to save the changes.

- |    |                    |   |
|----|--------------------|---|
| 3. | Annunciator panel  | PRESS <b>TEST</b> and check that the <b>ALT1, ALT2, ENG (YELLOW)</b> and <b>ENG (RED)</b> warning lights illuminate |
| 4. | Engine instruments | CHECK   |

<b>NOTE</b>
-------------

*Oil can be brought up to temperature during taxiing.*

- |     |                                       |   |
|-----|---------------------------------------|---|
| 5.  | Voltmeter                             | CHECK if GREEN                              |
| 6.  | Ammeter                               | CHECK if GREEN                              |
| 7.  | Trim switch and indication            | functional CHECK                            |
| 8.  | Flap switch and indication            | functional CHECK, afterwards UP             |
| 9.  | <b>P/S Heat</b> switch (if installed) | ON , <b>P/S HEAT</b> warning light goes off |
| 10. | <b>P/S Heat</b> switch (if installed) | OFF, <b>P/S HEAT</b> warning light goes on  |
| 11. | all switches                          | AS REQUIRED                                 |

### 4.5.4 Taxiing

- |    |                                 |                                 |
|----|---------------------------------|---------------------------------|
| 1. | Parking Brake                   | RELEASE                         |
| 2. | Brakes                          | CHECK                           |
| 3. | Nose Wheel Steering             | CHECK (function, free movement) |
| 4. | Flight instruments and Avionics | CHECK                           |

<b>CAUTION</b>
----------------

*Do not operate the engine at high RPM when taxiing to prevent damage to the propeller through stones or other foreign objects.*

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#### 4.5.5 Before Take-off (at the Taxi Holding Position)

- |     |   |  |
|-----|---|--|
| 1.  | Brakes  | APPLY  |
| 2.  | Parking Brake                                   | SET  |
| 3.  | Compass and gyro Instruments                    | CHECK setting  |
| 4.  | Fuel Selector Valve                             | LEFT or RIGHT, switch to the fuller tank   |
| 5.  | Fuel Pressure                                   | CHECK if in the GREEN range (otherwise, <u>do not attempt</u> take-off)  |
| 6.  | Engine instruments                              | CHECK if in the GREEN range  |
| 7.  | Throttle  | SET 1700 RPM   |
| 8.  | Ignition switch                                 | Magneto check: SWITCH through: "L-BOTH-R-BOTH" – positions.<br>CHECK RPM-drop<br>max. RPM-drop: 120 RPM<br>max. difference L/R: 50 RPM<br>RPM drop must be noticeable<br><u>then</u> : BOTH position                 |
| 9.  | Carburetor heat                                 | PULL (ON)<br>(RPM drop: 20 to 50 RPM)  |
| 10. | Carburetor temperature indicator (if installed) | CHECK  |
| 11. | Carburetor heat                                 | PUSH (OFF)   |
| 12. | Propeller control lever                         | SWITCH 3 times between START and CRUISE positions (end stops)<br>Check points:<br>1) RPM drop: 200 ± 50 RPM<br>2) increase manifold pressure<br>3) constant oil pressure (± 0,5 bar)<br><u>then</u> : START position |
| 13. | Throttle  | IDLE   |
| 14. | <b>Fuel Pump</b> switch                         | ON   |
| 15. | Flap switch                                     | T/O  |
| 16. | Trim switch                                     | white marking  |
| 17. | Circuit breakers                                | CHECK all set  |
| 18. | Control column                                  | CHECK for free movement  |
| 19. | Lap belt  | FASTENED and TIGHTENED   |
| 20. | Canopy  | CLOSED and LOCKED  |
| 21. | Parking brake                                   | RELEASE  |

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#### 4.5.6 Take-off (up to 50 ft)

- |    |                          |                                    |
|----|--------------------------|------------------------------------|
| 1. | Throttle                 | WIDE OPEN                          |
| 2. | Tachometer               | CHECK if within 2300 - 2385 RPM    |
| 3. | Elevator, control column | NEUTRAL during initial ground roll |
| 4. | Rudder pedals            | Maintain direction                 |
| 5. | Rotatespeed              | 50 KIAS                            |
| 6. | Climb speed              | 57 KIAS                            |

**CAUTION**

*To increase power setting raise RPM first and open throttle second.  
To decrease power setting close throttle first and lower RPM second.*

**CAUTION**

*For the shortest take-off distance over a 50-feet obstacle at sea level:*

- |    |                       |         |
|----|-----------------------|---------|
| 7. | Rotate speed          | 50 KIAS |
| 8. | Climb speed ( $V_x$ ) | 52 KIAS |

#### 4.5.7 Climb

- |    |  |                               |
|----|--|-------------------------------|
| 1. | Throttle                                 | WIDE OPEN                     |
| 2. | Propeller control lever (max. 5 minutes) | 2385 RPM, afterwards 2260 RPM |
| 3. | Engine instruments                       | CHECK if in GREEN range       |

**NOTE**

*During take-off and climb at take off power the yellow **ENG** warning illuminates because the maximum continuous rpm is exceeded. This is acceptable for max. 5 minutes.*

- |    |                             |                 |
|----|-----------------------------|-----------------|
| 4. | Flap switch                 | UP              |
| 5. | Climb speed                 | 65 KIAS         |
| 6. | <b>Fuel Pump</b> switch     | OFF             |
| 7. | <b>Landing Light</b> switch | OFF             |
| 8. | Trim switch                 | SET as required |

**NOTE**

*The best rate-of-climb speed,  $V_y$ , is a function of the operating weight and decreases with altitude. For more information, refer to Section 5.2.6.*

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#### 4.5.8 Cruise

- |    |                         |  |
|----|-------------------------|--|
| 1. | Throttle                | AS REQUIRED (Ref. to Section 5, Page 5-11) |
| 2. | Propeller control lever | SET 1650 to 2260 RPM                       |

**CAUTION**

*Continuous operation with throttle wide open and propeller revolution below 2140 RPM should be avoided to prevent engine damage in particular at pressure altitudes below 3000ft and at high CHT (see SL-912-016)*

**NOTE**

*For best manifold pressure/propeller speed combinations: Refer to Section 5, page 5-11*

- |    |   |                                      |
|----|---|--------------------------------------|
| 3. | Flaps switch                                    | UP                                   |
| 4. | Trim switch                                     | SET as required                      |
| 5. | <b>P/S Heat</b> switch (if installed)           | AS REQUIRED, OFF AT OAT >59°F (15°C) |
| 6. | Engine instruments                              | CHECK if in GREEN range              |
| 7. | Carburetor temperature indicator (if installed) | MONITOR                              |

**CAUTION**

*During flights above a pressure altitude of 6000 ft, the fuel pressure warning light must be monitored closely. If the fuel pressure falls below the GREEN range the **Fuel Pump** must be switched ON to prevent fuel vapor formation in the fuel system.*

#### 4.5.9 Descent

- |    |   |                            |
|----|---|----------------------------|
| 1. | Throttle  | First decrease AS REQUIRED |
| 2. | Propeller control lever                         | Second SET above 2000 RPM  |
| 3. | Carburetor heat                                 | AS REQUIRED                |
| 4. | Carburetor temperature indicator (if installed) | MONITOR                    |

**CAUTION**

*For a rapid descent proceed as follows:*

<i>Throttle</i>	<i>First IDLE</i>
<i>Propeller control lever</i>	<i>Second START</i>
<i>Carburetor heat</i>	<i>PULL (ON)</i>
<i>Flaps</i>	<i>UP</i>
<i>Airspeed</i>	<i>130 KIAS</i>
<i>Oil and cylinder head temperature</i>	<i>maintain in GREEN range</i>

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#### 4.5.10 Landing

- |     |                             |                  |
|-----|-----------------------------|------------------|
| 1.  | Lap belt                    | CHECK SECURE     |
| 2.  | <b>Fuel Pump</b> switch     | ON               |
| 3.  | Carburetor heat             | PULL (ON)        |
| 4.  | Throttle                    | AS REQUIRED      |
| 5.  | Airspeed                    | 90 KIAS          |
| 6.  | Flaps switch                | T/O or LDG       |
| 7.  | Trim switch                 | AS REQUIRED      |
| 8.  | Flaps switch                | LDG              |
| 9.  | Approach speed              | 60 KIAS          |
| 10. | Propeller control lever     | START            |
| 11. | <b>Landing Light</b> switch | ON (as required) |

**CAUTION**

*In strong headwinds or crosswinds, in turbulent air or in wind shear, it may be desirable to approach using less flaps and at a higher airspeed.*

#### 4.5.11 Go-Around (Balked Landing)

- |    |                         |                 |
|----|-------------------------|-----------------|
| 1. | Throttle                | First WIDE OPEN |
| 2. | Propeller control lever | Second START    |
| 3. | Carburetor Heat         | PUSH (OFF)      |
| 4. | Flaps switch            | T/O             |
| 5. | Airspeed                | 65 KIAS         |

**CAUTION**

*Any operation with throttle wide open and carburetor heat engaged should be avoided to prevent engine damage.*

#### 4.5.12 After Landing

- |    |                                       |             |
|----|---------------------------------------|-------------|
| 1. | Throttle                              | AS REQUIRED |
| 2. | Flaps switch                          | UP          |
| 3. | <b>P/S Heat</b> switch (if installed) | OFF         |
| 4. | Carburetor Heat                       | PUSH (OFF)  |
| 5. | <b>Fuel Pump</b> switch               | OFF         |
| 6. | Transponder                           | OFF         |
| 7. | <b>Landing Light</b> switch           | OFF         |

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**4.5.13 Engine Shutdown**

- |    |                          |                             |
|----|--------------------------|-----------------------------|
| 1. | Throttle                 | IDLE                        |
| 2. | Parking Brake            | SET                         |
| 3. | Flaps switch             | LDG                         |
| 4. | ELT                      | CHECK (frequency 121.5 MHz) |
| 5. | <b>Avionics</b> switch   | OFF                         |
| 6. | Ignition Switch          | OFF                         |
| 7. | Electrical equipment     | OFF                         |
| 8. | <b>ALT1 / BAT</b> switch | OFF                         |

**NOTE**

The GARMIN G500 and the MVP-50P-AQ are turned off with the **ALT1/BAT** switch.

- |    |                      |             |
|----|----------------------|-------------|
| 9. | Chocks and tie-downs | AS REQUIRED |
|----|----------------------|-------------|

**4.5.14 Refueling**

1. Engine Shutdown as in Section 4.5.13
2. Ground the aircraft

**CAUTION**

During refueling, the aircraft **must** be grounded (for example at the end of the exhaust pipe.)

3. Open fuel tank filler cap
4. Refuel both tanks equally

**NOTE**

*Insert the fuel pump nozzle carefully into the tanks to avoid damage.*

5. Replace the fuel tank filler caps
6. Remove grounding cable

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**4.5.15 Flight in Heavy Rain and/or with Wing Contamination****CAUTION**

*When flying with wet and/or contaminated wings and control surfaces, performance and handling qualities may be reduced. This applies in particular to take-off distance, climb performance, cruising speed and stall characteristics.*

*The stall speed may increase up to 3 kts and the air speed indicator may give false readings.*

*Visibility may deteriorate considerably in rain.*

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