

3.7 Off-field Landing

A precautionary landing at a non-prepared site may be performed at pilot's discretion in order to avoid unexpected weather, in case of severe illness of the pilot or a passenger, or if technical defects are suspected, for example sudden and severe rotor vibrations.

- Select a suitable landing site from safe altitude, considering slope, wind speed and direction
- Fly a reconnaissance pattern to check for obstacles, especially power lines, wires, and cables in the approach and go-around path
- Overfly the landing site to check for obstructions such as fences, ditches, rocks, height of vegetation, and select most suitable touch-down zone
- Perform a normal approach and touch-down into wind with minimal ground speed

3.8 Flight Control Malfunction

In case of a flight control failure the gyroplane can be controlled with the remaining primary and secondary controls, including power and trim. An immediate reduction of power, respectively speed may be necessary to avoid pitch oscillations (phugoid) or other effects affecting dynamic or static stability. Navigate to a suitable landing site with wide and shallow turns and approach against the wind.

3.8.1 Engine Power Control / Throttle

Throttle jammed open or max

Navigate to a suitable landing site with the power set. If over safe terrain, magneto switches may be used to control power. When within gliding distance to the selected landing site, shut-down engine to perform a power-off landing as per Emergency Procedure "Engine failure".

NOTE

In case of a control cable breakage the carburettor will be automatically set to full throttle position.

Throttle jammed closed

Land as per Emergency Procedure "Engine failure". Residual power may be used to extend the glide.

3.8.2 Rudder Malfunction

In case of a stuck or loose rudder, continue flight to a suitable, preferably wide landing site that allows a landing into the wind. If necessary reduce power to avoid excessive side slip. Align gyroplane prior to touch-down, using engine torque or lateral control input to the side where the nose is pointed.

3.8.3 Rotor Head Control

In case of a rotor head control malfunction, control pitch attitude using careful trim input and power setting. Use rudder for directional control and for shallow turns. In some conditions it may be appropriate to reduce power/speed in order to avoid phugoid effects or a possible negative yaw-roll coupling. Approach landing site with wide and shallow turns.

3.9 Warning and Caution Lights

3.9.1 GEN (orange) or Low Volt (orange) Indicator Light

The GEN lamp, when lit, indicates that there is no voltage being supplied from the regulator circuit to the battery.

It is normally lit when the engine is stationary or at very low rpm.

It is normally not lit in flight, but may be seen to pulse gently in low light conditions.

The LOW VOLT lamp, when lit, indicates that the available voltage from the battery has dropped below 12v,

If both lamps are on with the engine running at more than 2,500rpm, then it is likely that the charging circuit has failed, and that the aircraft is operating on battery power alone.

If only the LOW VOLT lamp is lit, then the aircraft voltage demand has exceeded supply, and demand must be reduced in order for the lamp to extinguish. NOTE! When lit, this lamp also indicates that the strobes, nav lights, landing lights and 12v socket (where fitted) have been turned off automatically, with automatic reconnection when the supply exceeds demand.

Required Action

ROTAX 912 ULS: If any of the indicators are permanently lit, switch off all unnecessary electrical consumers and land at the nearest airfield where maintenance can be performed. The battery is expected, if in good condition, to provide 30 minutes* of reserve power to supply the aircraft instrumentation and avionics, after which time electrical equipment may cease to function.

ROTAX 914 UL: If any of the indicators are permanently lit, switch off all unnecessary electrical consumers, it is recommended to perform a precautionary landing within 30 minutes. The battery is expected, if in good condition, to provide 30 minutes* of reserve power to supply the aircraft fuel pump, instrumentation and avionics, after which time