

Update 3 Rules & Regulations

May 8th, 2016

Topics: Batteries, Safety Switch, Payload Box, Trim weight

1 Types of batteries

The battery (“motor battery”) mentioned in the Rules and Regulations provides electrical power for the motors, **only**. All other electronical or electrical components (receiver, servos and so on) are not to be connected to the motor battery.

Three configurations are possible:

- Single Battery: means a single over-the-counter battery with 5000mAh, 10S
- Battery pack: means a combination of single over-the-counter batteries, e.g. 2x 5000mAh 5S series-connected
- Multiple batteries: Means different single batteries/different battery packs that have no connection to each other.

1.1 Motor battery/batteries/battery pack

The motors have to be powered by a single battery, battery pack or multiple batteries (5000mAh each), which do not exceed a number of 10 cells in total (e.g. 1x 10S or 2x5S)

Here is a list of possible options:

-) Single motor battery (10S, 5000mAh) is used for all motors.
-) One motor battery pack (2x5S, 5000mAh each, connected in series) is used for all motors.
-) Multiple batteries for different groups of motors (e.g. four-engined aircraft: two motors are powered by one battery/battery pack – 5S, 5000mAh, the other 2 motors are powered by another battery/battery pack – 5S, 5000mAh). This set-up must be adjusted in case you are not using 4 motors in total. Total number of cells for single batteries/battery packs/multiple batteries: 10S.

1.2 Electronics battery

All other electrical and electronical systems (e.g. receiver, servos etc.) on your aircraft must receive their energy from a different energy source, which is not further specified by the advisory board. Sufficient energy supply for those components lies within the team’s responsibility.

2 Safety switch:

According to the Rules and Regulations a safety switch has to be connected to the motors. It ensures, that the motors can be manually cut off from their energy supply in a case of emergency.

3 Payload Box

The Payload box has to be manufactured by each team itself. Refer to the Rules & Regulations for more details and tolerances. In order to check the PLB mass, it is necessary that it can be removed by the jury.

4 Trim weight

The trim weight has to be manufactured by each team itself. Refer to the Rules & Regulations for more details and tolerances. In order to check the TW mass, it is necessary that it can be removed by the jury.