



Melbourne Multirotor Racing Club

Freestyle Competition Rules V1.0 - April 2016

Freestyle Class Specifications

Aircraft competing in Aerial Freestyle Competition must adhere to similar specifications to FPV racing and must be scrutineered as part of any official event for safety and adherence to current regulations.

Aircraft competing **MUST** adhere to the following specifications

Maximum Frame Size:	300mm motor to motor
Maximum Battery Size:	4S or 14.8 volts nominal pack voltage
Maximum Propellor Size:	6 inch
Maximum All Up Weight:	1kg
Maximum Video Transmitter Power:	25mw

Competition Outline

- One pilot will compete at a time during a competition heat.
- Each pilot will have exclusive use of the course for the duration of their competition heat. No other aircraft may fly or be powered on during this time.
- Pilots will have a maximum of **3 minutes** flight time during their competition heat. During this time the pilot (or his nominated spotter) may recover his aircraft from the course in the event of a crash and make repairs and resume flying. Judges may elect to penalise the pilot for this in their scoring however this is not mandatory by judges.
- Pilots may play music alongside them whilst flying, the judges must be able to also hear the music clearly during the competition heat.
- In the event of the pilot crashing due to a technical fault outside their control, or by a source deemed not the pilot's fault the Competition Director may elect to allow the pilot to restart their competition heat. In the event of the pilot needing to make repairs prior to the restart the Competition Director must give the pilot at least 10 minutes repair time or can elect to move the pilot's heat to the end of the heats.



- Pilot's must carry a separate HD capable camera such as a GoPro or Mobius/RunCam and record their competition heat for later use (including but not limited to judging or future competition promotion) by the MMRC. The pilot must agree to provide a copy to the MMRC when requested.

Judging

- Aerial Freestyle Competition Heats shall be judged by a minimum of 3 judges at one time.
- Competition Judges must view the competition heat via the FPV feed live from the aircraft.
- Competition Judges can elect to use FPV goggles or screen.
- The same 3 judges **MUST** judge all competition heats at a single event. No judges can be substituted. In the event a judge must retire from judging a competition their scores will be subtracted from all scoring at the event and only the remaining judges scores will be used.

Scoring

3 categories for scoring will be used during Aerial Freestyle competition. These are:

- **Technical Ability**
- **Obstacles Usage**
- **Overall Feel & Flow**

Judges must each give a score **out of 10** for each category for each pilot for a total of **30 points**. Each of the judges scores will then be totalled for an overall score for the competition heat. In the event of a tie for a place on points, the Competition Director may elect to hold a final heat with the tied pilots to determine the winner.

Judges may elect to penalise the pilot for any crashes or failed maneuvers but this is not mandatory and may only reduce their overall score to reflect this.

Judges must demonstrate a reasonable knowledge of freestyle and must use the following criteria outlined for each category to arrive at their overall score out of 10.



Judging Criteria

Judges must use the following criteria for each category when judging a competition heat.

Technical Ability Criteria

Judges must note how difficult and well executed each maneuver is when performed by the pilot. They then must take each of these into consideration when deciding their score out of 10.

They must note In particular:

- Was the trick easy to perform given the time taken?
- Was the trick performed at speed?
- Was their considerable risk of crashing during the trick?
- Was the FPV view good/visibility good during each of the maneuvers?
- Was the trick performed more than once during the heat?
- Did the pilot demonstrate control or smoothness during the heat?
- Was there any new or “wow” tricks performed?

Obstacle Usage Criteria

During competition heats pilots may elect to use any of the obstacles on the course provided by the event organisers. It is advised that at least 1 gate and 2 flags be used as obstacles to give pilots some range of obstacle use.

Judges must consider the following when deciding their score out of 10:

- Did the pilot use any of the obstacles and how often?
- Did the pilot use any of the obstacles in an unusual or new way?
- Did the pilot risk crashing using the obstacle and how much risk was there?
- How close was the pilot to the obstacles during the heat?

Overall Feel/Flow Criteria

This category is the hardest to judge and is purely based on personal opinion of the judge. Judges must give a score out of 10 on how the overall flow of the heat went and how the heat made them feel by watching it. In particular judges must note:

- Overall smoothness of the heat, how well the pilot controls the aircraft.
- Did each of the maneuvers flow from one into another?
- How exciting was the heat to watch? How did it make you feel?
- Did the music match the tricks and overall flow of the flight?