

IMAV2017 Safety Notice

Version 1.0

All participants are required to be familiar with the safety rules and comply with them. By signing this document, team captains declare that they acknowledge the safety procedures that they have to enforce or demonstrate during the competition and prior to any flights.

Safety rules

- Maximum weight (indoor and outdoor): **2 kg**
- Maximum flight altitude above ground (outdoor): **30 meters**
- Safety areas as described in the Google Earth file available on imav website and the map in the outdoor competition section:
 - All MAVs should stay inside the flight area (**green line**). When crossing this limit, a MAV should either land or turn back immediately inside the flight area.
 - The second border (**red line**) defines the border of the no-fly zone. Any MAV crossing this line should turn **OFF** its motors (fixed-wing aircraft may glide upon the control of the safety pilot and land as fast as possible).
- Emergency kill switch (turns OFF all motors immediately) **mandatory for all MAV**:
 - A separated remote control (RC) with the kill switch is mandatory for MAV of more than 1 kg. **Emergency landing should be triggered immediately in case of RC loss and motors should be stopped after 5 seconds of RC loss.** The safety pilot should always be in view of its MAV.
 - For MAV lighter than 1 kg without redundant remote control link (for instance with WIFI link only), **motors should stop after 5 seconds of communication loss.**
- Allowed frequencies and maximum power:
 - 26 MHz, 41 MHz, 72 MHz: max power 100 mW
 - 2.400 GHz to 2.454 GHz and 868 MHz: max power 100 mW
 - 2.455 GHz to 2.483 GHz : max power 10 mW
 - 5.8 GHz: 25 mW
 - **The use of the 900 MHz frequency is not allowed**

Safety checks

Before flights:

- The implementation of the flight area protection is the responsibility of each team. Obvious infringements of the flight area borders may lead to penalty or disqualification.
- Before each flight, each teams have to demonstrate the kill switch mechanism to the judges.
- Safety briefings might be held before or during the competitions. All information and instructions given during these briefings should be carefully applied.
- Weight and size of the MAVs will be checked before the flights.

During the flights:

- If one of the judges or the flight director is requesting the landing of one or all the MAVs, this should be performed in the shortest delay with respect to the safety of the people.
- If one of the judges or the flight director is requesting to stop motors from the kill switch for one or all the MAVs, this should be performed **without delay**.

Team captain signature