Multirotor models

Safety Rules

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Note: Many of these Rules are multirotor model specific and are to be used as a supplement to the SAMAA National Safety Rules abridged parts 1 and 2 and the SAMAA National Safety Code. In no way do these specific rules give a multirotor model pilot permission to ignore the SAMAA Code **when flying at a SAMAA Registered field, all SAMAA and Club Operating Rules, Mops, and Club Bylaws shall apply to the pilot of the model.**

Definitions

Model Aircraft -- means a non human carrying model aircraft capable of sustained flight in the atmosphere and used exclusively for air display, recreation, sport or competition activity.

Recreational activity -- means a model, multirotor or other, used exclusively for recreational purposes where there is no commercial outcome, interest or gain.

Visual line of sight -- means operation of the model, multirotor or other, in which the remote pilot maintains direct unaided visual contact with the model aircraft, at all times, to manage its flight. (and in the case of a multirotor to a maximum of 500m from the pilot)

Multirotor model – means a model aircraft, which hovers and flies by using the thrust and downwash from more than two motors with propellors attached, mounted shafts vertical, on a rigid frame, which is flown, always in line of sight and under control of the pilot using a hand held transmitter.

Rules

1. All pilots flying multirotor models shall be flying for recreational purposes and shall hold a valid SAMAA Membership card.

2. All pilots flying multirotor models shall fly, using a hand held transmitter, so as to remain within line of sight, No multirotor model shall be equipped with any device that allows it to be flown automatically to a selected location.

3. Only ICASA type approved, Transmitters and Frequencies shall be used when flying at a SAMAA Registered club or site.

4. Reserving your frequency is mandatory before switching on your transmitter.

5. No pilot shall fly his model aircraft, from the flightline, when other pilots are present, unless he holds a SAMAA multirotor advanced qualification, or is accompanied by an qualified multicopter R/C pilot

6. Only pilots who are actually flying and their instructor or observer may be in the flight area.

7. The use of an observer is strongly recommended, especially if two or more multirotor models are flying simultaneously.

8. Pilots shall keep a safe distance between their multirotor models and all people at the flying site, including themselves. These distances shall be;

5.1 The pilot shall stand a minimum of 5 meters from a multirotor model which is hovering.

5.2 A learner pilot shall fly a minimum of 10 meters from himself and his instructor.

5.3 The pilot and Judges shall remain a minimum of 15 meters from a flying multirotor model, when participating in a Competition.

5.4 All miltirotor models shall fly a minimum of 50 meters from all non participating persons or spectators, especially if the multirotor model is participating in a Event, Airshow or Display.

9. Never under any circumstances should a multirotor model be flown between the pilot, the spectators, or other pilots or the pit area.

10. Pilots shall adhere to all rules applicable at the flying site and keep their multirotor models within the established flight boundaries of the flying site.

11. Always ensure that the control system is working correctly before flying your multitotor, especially after any work has been carried out or model adjustments have been made to the electronics, and gyros.

12. If using a PCM receiver ensure that the failsafe function is set to at least reduce the throttle to the low rpm position or to cut the motors. The other controls are recommended to be set to the ‘hold’ setting.

13. Always ensure that the throttle stick is set to idle and any flight mode switches are set to normal flying settings before attempting to fly the model.

14. Do not hover directly in front of other pilots. .

15. Ensure that the batteries have sufficient charge to complete the flight proposed, before making a flight. Note: - It is advisable to fit a battery monitor.

16. It is mandatory that regular radio range checks and test of the model electronics be done, preferably at the start of a days flying session. All new and rebuilt models must undergo range checks prior to flight. When an ‘motor running’ range test is performed, ensure the model is held firmly, and that your helper can kill the engine via an alternative method. i.e.: disconnecting the battery power lead, or switching off the ESC, etc.

17. Never power up the motors of your multirotor model while in the pit area.

18. With all electric models, the main battery power to the speed control may only be connected in the take off area when the pilot is ready to take off and start flying. The power will similarly be disconnected immediately after the flight and before the multirotor model is returned to the pits.

19. Never leave a multirotor model running unsupervised under any circumstances.

20. All models shall be airworthy. The pilot is responsible for the pre-flight inspection before each flying session.

21. New and rebuilt multirotor models must undergo a thorough inspection by the club safety officer or in his absence the most experienced person available. This inspection should preferably not be done by the builder.

22. Regularly check for damaged wires, loose connections, or dry solder joints, if found do not fly until repaired by a competent person.

23. When flying your multirotor model with fixed wing aircraft present it is advisable to comply with the following general guide lines.

23.1 At many clubs helicopters/ multirotor models are only permitted to take off and land from the designated helicopter/ multirotor model area(s).

23.2 Multirotor models are not permitted to fly in a manner that interferes with other aircraft flying.

23.3 Only proficient multirotor pilots (who hold a SAMAA Multirotor Advanced or fixed wing solo for their model), or has a qualified SAMAA pilot with him, may join the fixed wing circuit and even then only if he maintains forward flying speed in the same direction as the other aircraft.

23.4 The hovering of multirotor models over the runway or in the flying circuit of the other aircraft is forbidden.

23.5 Due care and consideration should be observed when models such as fun fly, 3D type or park flyers are flying.

23.6 If flying from a runway where other pilots are flying, to announce your intentions, ie. “landing”, then after landing, announce if applicable “removing multicopter from runway” and after removal announce “runway clear”

24 Note; The maximum allowable take off weight of a multirotor model is 7,0 Kgs. The maximum battery voltage that may be used is 51volts.

25 The multirotor pilot must understand that he is fully liable for any costs incurred resulting from the operation of his multirotor model if he does not comply with these multitotor Rules, SAMAA Rules and the SAMAA Operations Manual.

. Chairman MHSA 2015