



# Model Helicopter

## Safety Rules (Abridged)



Issue 1 2006 (amended)

Note: These rules are model helicopter 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 does it give a helicopter pilot permission to ignore the SAMAA Code.

1. Reserving your frequency is mandatory before switching on your transmitter.
2. A safety officer will be appointed at all helicopter flying events.
3. Only pilots actually flying and their instructor or observer may be in the flight area.
4. The use of an observer is strongly recommended, especially if two or more helicopters are flying simultaneously.
5. Pilots shall keep a safe distance between their helicopters 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 helicopter that is hovering.
  - 5.2 The pilot shall stand a minimum of 10 meters from the helicopter, if a learner or pupil pilot is flying.
  - 5.3 The pilot and Judges shall remain a minimum of 9 meters from a flying helicopter, when participating in a Competition.
  - 5.4 A minimum of 30 meters if spectators are present or the helicopter is participating in a Event, Airshow or Display.
6. Never under any circumstances fly the helicopter between yourself, the spectators, other pilots or the pit area.
7. Pilots shall enquire about and adhere to all rules applicable at the flying site and keep their model helicopters within the established flight boundaries of the flying site. There shall be a minimum distance of 30m between the established flight line and any spectators.
8. Always ensure that the control surfaces are working in the correct direction before starting your helicopter especially after any work has been carried out or radio adjustments have been made. eg. - Aileron's, elevator, rudder, throttle and gyro.

9. 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 engine completely. The other controls are recommended to be set to the 'hold' setting.
10. Always ensure that the throttle is set to idle and any flight mode switches are set to NORMAL / HOVER mode before attempting to start the motor.
11. When starting the heli always ensure that the rotor head is held firmly. Never release this until you are ready to take off from the appropriate area.
12. Do not hover directly in front of other pilots. This is to ensure that they will have a clear view of their own models.
13. Ensure that the blades are securely tightened within the grips. This can be checked by holding the helicopter sideways with the blades opened; a gentle shake of the helicopter should make the blades fall under their own weight. This can help eliminate boom strikes.
14. Ensure that the batteries have sufficient charge before making the flight. Note: - It is advisable to fit a battery monitor.
15. Regularly range test the model and look for any servo glitching and if unsure then do not fly. All new and rebuilt models must undergo range checks prior to flight. When an 'engine running' range test is performed, ensure the model is held firmly by the rotor head and that your helper can kill the engine via an alternative method. i.e.: disconnecting the fuel line or turning the ignition switch off etc.
16. Never spin the blades under power whilst in the pit area.
17. With electric helicopters, the main battery power to the speed control may only be connected in the take off area when the pilot is ready to spin up and start flying. The power will similarly be disconnected immediately after the flight and before the Helicopter is returned to the pits.
18. Never leave a helicopter running unsupervised under any circumstances.
19. All models shall be airworthy. The pilot is responsible for the pre-flight inspection before each session.
20. New and rebuilt helicopters 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.
21. Regularly check that all servos are not under excess load. This can be done by removing the link from the servo and attempting to move the linkage by hand. This will indicate if there are any stiff spots in the system. While the link is removed from the servo, also check that the servo does not move more than the maximum limits of the control. Note: - This check should be carried out in the workshop.

22. Regularly check for worn or damaged control linkages and chipped or damaged rotor and tail blades.

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

23.1 At many fields, helicopters are only permitted to take off and land from the designated helicopter area(s).

23.2 Helicopters are not allowed to fly in a manner that interferes with other aircraft flying.

23.3 Only proficient helicopter pilots may join the fixed wing circuit and only if they maintain forward flying speed in the same direction as the other aircraft.

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

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

23.6 It is advisable after announcing your intentions to land, to land, and there after to state "helicopter "on" or "off" runway, taxiways or the designated helicopter area. This is to avoid a situation where an aircraft needs to land (due to a dead motor etc.) and a helicopter has landed on the runway and its rotors are spooling down and the helicopter pilot is unable to move his helicopter from the runway.

24 Note; The present legal maximum allowable all up weight of a model helicopter, is limited to 6,5 Kgs. At the request of the Helicopter Sig a procedure is presently being prepared, which will permit, under controlled and specified conditions, larger proven helicopters, and suitably qualified pilots, to fly in the RSA. This procedure when completed will be submitted to RAASA for acceptance, and following this acceptance, SAMAA will have the Insurance policy extended to legally permit the flying of these larger models. Set out below are some of the conditions which will need to be observed by pilots flying these larger helicopters;

25 Large helicopters (>1,8m rotor diameter) must always be flown with an observer present.

26 Large helicopters and Turbine powered helicopters must be fitted with a radio controlled method to kill the motor, other than the throttle, i.e.: an electronic kill switch or a fuel cut-off.

27 Large helicopters will be inspected during construction and test flown after certification by an experienced and competent pilot.

- 28 Turbine powered helicopters, will have the required helpers, and equipment present, before starting takes place. The helicopter must be well away from spectators and other pilots, and in an area that has the minimum fire risk.
- 29 Turbine powered helicopter pilots must, in addition to the SAMAA and MHSA safety rules, adhere to all relevant safety rules of the South African Model Jet Association (SAMJA). This is to ensure the safe integration of a turbine motor into a helicopter.

Chairman 2006