



## **NZ RC Helicopter 3D Competition Pilot Checklist**

**This list was collated using input from pilots throughout NZ and I thank them for their contributions...**

The first thing a pilot should do when entering any 3D event in New Zealand is go here:

[http://www.3dheli.co.nz/content/?page\\_id=6](http://www.3dheli.co.nz/content/?page_id=6)

and download (perhaps also print) the Freestyle 3D Competition Rules. This document will give you basic details on how a competition is run as well as rules, K Factor Maneuver values etc. Based on this document, you will be able to ascertain the class you should place yourself in, the set maneuvers for that class as well as K factor maneuvers you may select from. It is a good idea to keep a copy of the rules in your flight box so you can reference it during an event as required.

After reading through and understanding the rules, a pilot should download and print off several copies of the 3D Competition Calling Card. One card should be filled out for and prior to each round of an event (most events have up to 3 rounds). You will need to select K Factor Maneuvers for each round you compete in. They can be the same maneuvers in each round if you wish. You should also print and fill out the Freestyle 3D Competition Registration and Entry Form and bring it with you to the event.

Once you know what your set maneuvers are and you have decided which K Factor Maneuvers you wish to perform you should create and practice your freestyle routine, paying attention to observe the time limits found in the rules. Some pilots choose to make up a routine as they go along but the pilots who place the best are those that set and practice a routine well in advance of an

event.

Just a reminder that most events require that you have your NZMAA 'Wings' badge to be allowed to compete in the event. In fact many fun-fly's require this too. The Wings Badge should be easy for most pilots to pass and all heli pilots should make this their first priority. At most events there are Wings assessors on hand if you wish to get your Wings on the day. More info can be found here:

<http://nzmaa.org.nz/manuals/Wings.pdf>

**Below are some general tips and hints to help you get the best out of any event you enter.**

1. Arrive early, do a few flights to get your machine tuned. Different altitudes of different flying fields can have a marked effect on engine power (if you are running a Nitro powered heli), remember to lean your engine if you're going up in altitude from your home field. You can also increase your nitro percentage to compensate for the drop in power as required.

2. Have a look at where the flight line is, check for any obstructions eg fences, large bushes or trees, wind socks, that you might have to avoid during your flights.

3. Run through your compulsory maneuvers in your head & have a clear picture of what they should look like.

4. Pick your K factors, sometimes it's better to do a maneuver that you know you can do well & get top points for, even if it's a low scoring maneuver.

Your opposition might pick a high K factor that is beyond their skill & totally stuff it up getting zero points.

If it's getting near the end of the competition & it's a close one, then it's time to go out guns blazing, try something that you know you have half a chance of doing (you might pull it off & win the competition).

5. Never let anyone talk you into a maneuver that you know you're not comfortable with. The usual result is a dumb thumb & a smashed helicopter.

6. Take a few spare glow plugs, just before your slot the glow plug will burn out (murphys law). Don't stress, ask to be put back a pilot in the flight order. Or simply change it if its not a major job.

7. A good towel is the handiest thing in your flight box, once the adrenaline starts pumping your hands will probably start sweating, the mixture of glow fuel & sweat makes your grip on the transmitter near impossible sometimes.

8. Before the competition make sure that everything is well maintained, ie bearings, thrust bearings, batteries charged, etc
9. Prepare your routine long before a competition date, plan for the event, do not do it off the cuff.
10. Pick the maneuvers that you are comfortable doing. Simpler maneuvers done well with a nice transition between them will score better than hard ones done badly.
11. Have a back up routine so that if the wind, sun etc do not suit, you have a plan B.
12. Get the timing right so that you can finish within the time limit.
13. Practice the routine so that you can do it in your sleep.
14. Try and position maneuvers in front of you where possible .
15. Have a personal calling card made up for yourself.
16. Do not worry about the other competitors, do your own thing. Trying to beat the competition can be very costly. Keep to your plan.
17. Make sure you have a great weekend of flying & if possible come home with a helicopter that still flies!