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WORLDWIDE PARAGLIDING AND PARAMOTORING MAGAZINE. FOR FREE.



THE PARAGLIDING WORLD CUP'S NEW DRONE.



Photos: Ulric Jessop

Philippe Broers, the Paragliding World Cup's cameraman, is making some fantastic new films thanks to his remote controlled drone. *By Ruth Jessop*

Ulric Jessop's first words, when he got back from the Paragliding World Cup in Portugal three weeks ago were, 'Good God, Philippe has bought a drone and hasn't managed to injure himself with it yet.'

Intrigued, I sent Philippe Broers, the Paragliding World Cup's most accident prone cameraman, an email to find out all about his new toy – a *Dji Phantom 2* drone (<http://www.dji.com/product/phantom-2>), chosen as Philippe explained to me, because it has got a better battery than the others. Here is what else he had to say:

The prices of top quality drones have recently dropped so that even the good ones have started to become affordable. I paid 680€ total, with all the stuff, the gimbal and the shipping. Don't buy the cheap ones, they are money down the drain.

Traveling with it can be more expensive than the equipment price in the long run, if you have to pay excess baggage on an airline which in this case can be up to as much as 100€. Be careful how you pack it for traveling by plane – I have already broken a propeller because I incorrectly placed one that was inverted (there are two rotation directions) so it dived the next time I tried flying it. I now always look at the symbols!

A drone is a good alternative to rails and offers even more possibilities. Before getting the drone, I tried a camera trailing behind me attached to a fishing reel. It was too unstable so none of the images were good enough to use.



Philippe at the World Cup in Linzhou China in 2010

Photo: Ulric Jessop

With a drone, all shots are possible, like a cinema crane but better. It is interesting to note that Philippe initially bought his for use in towns rather than Paragliding World Cups!

Unexpectedly easy to use and even gust resistant if you buy one with a GPS. The only camera that I can use with mine is the *Go Pro Hero 3* for now (the stabilizer is calibrated for it).

With a drone, you don't have to worry about keeping props like booms out of the frame which makes it easier to do smooth movements.

To keep the images stable in flight, I use a gimbal dual axis stabilizer system (cheaper than the original one so a bit of soldering was necessary).

The batteries last about 20 minutes. I have found that with a pre scripted flight it's easy to get 4 flights in per competition day and get what I want.

The range is beyond visual range, although I have not really tested it. 1 km is already too far for the eye. I hope that maybe with the wifi android application I will be able to see what the drone sees but even then I think 5 km back and forth would exhaust the battery.

Other than that, the radio range can vary, 10 km is a bit much but I have heard that some people have flown it up to 2000 m straight up. Anyway much more than what I reasonably need for filming at the Paragliding World Cup.

VIDEOS WITH FOOTAGE FILMED FROM THE DRONE

Flying over the landing field in the 2014 Coeur de Savoie Paragliding World Cup plus the Mont Lambert launch

<http://vimeo.com/channels/paraglidingworldcup/96525448>

Flying over the St Hilaire launch with all the pilots laid out during the 2014 Coeur de Savoie Paragliding World Cup

<http://vimeo.com/channels/paraglidingworldcup/96822573>

Flying over the landing field at the 2014 Coeur de Savoie Paragliding World Cup

<http://vimeo.com/channels/paraglidingworldcup/97614600>

Droning around in front of the organization in the 2014 Portugal Paragliding World Cup

<http://vimeo.com/channels/paraglidingworldcup/98912657>

And just to prove that anyone can be a PWC cameraman

<http://vimeo.com/channels/paraglidingworldcup/97753032>

What other new innovations can we expect to see on Paragliding World Cup TV?

'We have been trying to do a live broadcast for years with the help of Chris and the locals but we have failed miserably every time, the only one that worked was at the women's open, but this last time we almost succeeded, maybe next time. I just got a new camera that has built in wifi and USTREAM capability, complicated though and it needs a good network access.'

To have a look at Philippe Broers' other work on the Paragliding World Cup TV channel:

<http://vimeo.com/channels/paraglidingworldcup>

You can see what you are filming at the time but I prefer not to bother doing this as I have had enough experience to be able to imagine the frames. To fly the drone and watch what it is filming at the same time, you would probably need an assistant to watch it or make a holder for your phone on the remote.

As for using it to fly beside you when you are paragliding around the course, even Philippe reckons this would be too dangerous and would require more than two hands. The short battery life of only 20 minutes would also be problematic.

I feel the drone is easy and accurate enough to fly near other pilots but I keep a good margin all the same. For close ups you would need a preflight plan discussed first with the pilots involved. ■



Krushevo Paragliding World Cup first task 20/7/2014 - <https://vimeo.com/101270219>

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