

Freestyle Aerobatics

A NEW TWIST ON FPV COMPETITION

TEXT & PHOTOS BY JOHN REID

One of the newest events coming out of FPV racing is the informal aerobatic competition known as “freestyle.” This event usually follows the FPV racing contest and is performed on the same racecourse, with the option of using the gates and flags as part of the pilot’s routine. Right now, freestyle is very informal and optional, but interest in this offshoot of racing is gathering momentum and it might well become its own segment of FPV racing. Freestyle recently got international attention at the Dubai World Drone Prix, where prizes were awarded in freestyle aerobatics. We got a chance to sit down with XHover’s Daniel Sandoval (right), an avid competitor in freestyle competition, to talk about this new type of FPV event.



FPV Racer: Tell us a little about how freestyle competition works. What do you guys do there, and how is it organized?

Daniel Sandoval: They usually have the FPV racecourse set up, and you are allowed to use the gates or flags as part of your routine. Most of the time, you have three minutes to perform your routine, but most guys don’t use all that time. Pilots try to get really crazy and perform

maneuvers that others won’t be able to fly. Most the time, this also leads to them crashing out and not using all of the time that is available for the flight. Some events allow music to enhance your performance.

FPVR: How do the judges grade your performance?

DS: Most judges watch the flight by putting

on some goggles, or they can watch by line of sight. I would rather them watch it through the goggles because line of sight looks good but they don’t get the FPV experience. Watching through the goggles is completely different, feeling more like a ride and having more impact. I’d rather they judge my performance with the goggles on.

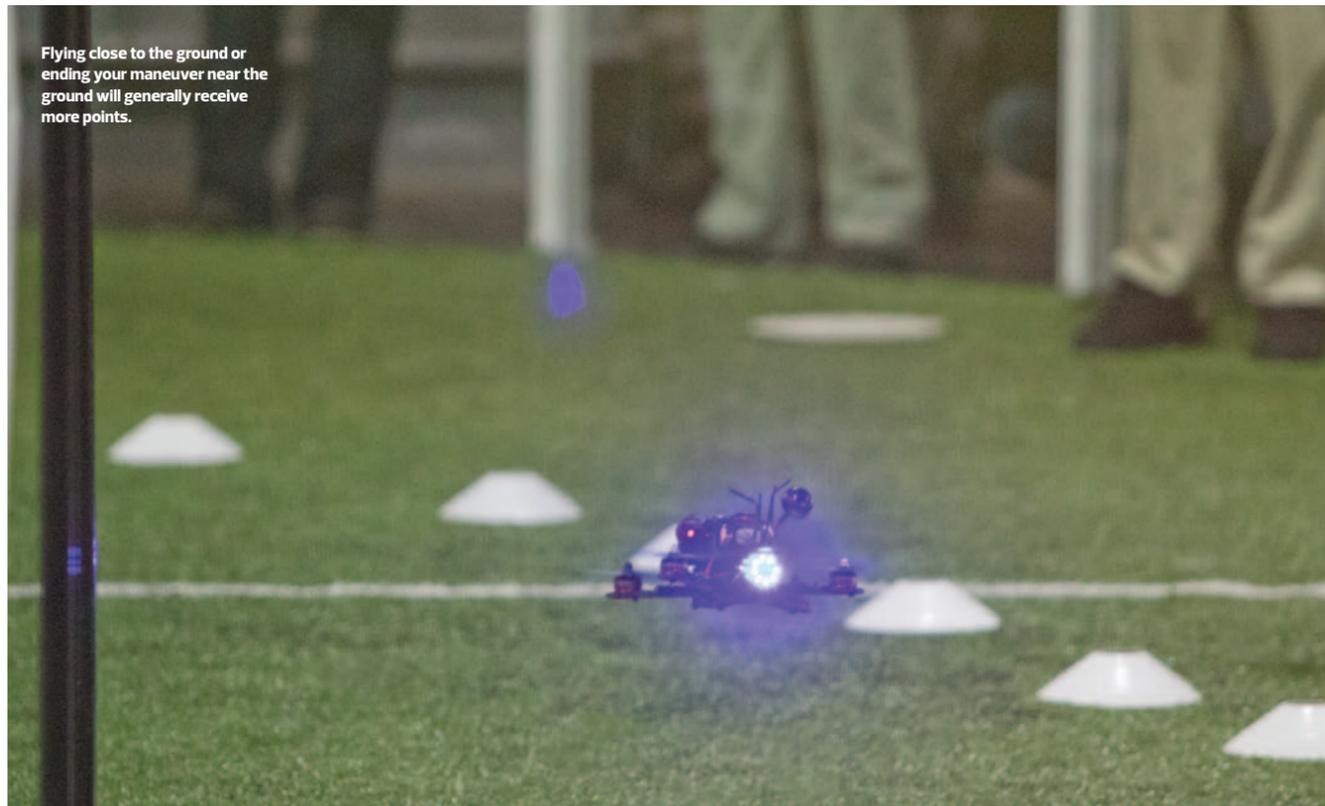
FPVR: Are there any criteria or a minimum number of maneuvers that you have to perform?

DS: No, there’s no minimum. Anybody can do any type of freestyle, and there are no mandatory maneuvers. However, depending on how crazy you want to fly, this will lead to higher point values for maneuvers. Basically, we’re just trying to impress the judges with flying skills. So the “wow” factor is important, by flying with speed close to the ground or using available gates and flags. Another factor is the smoothness and precision of your flying.

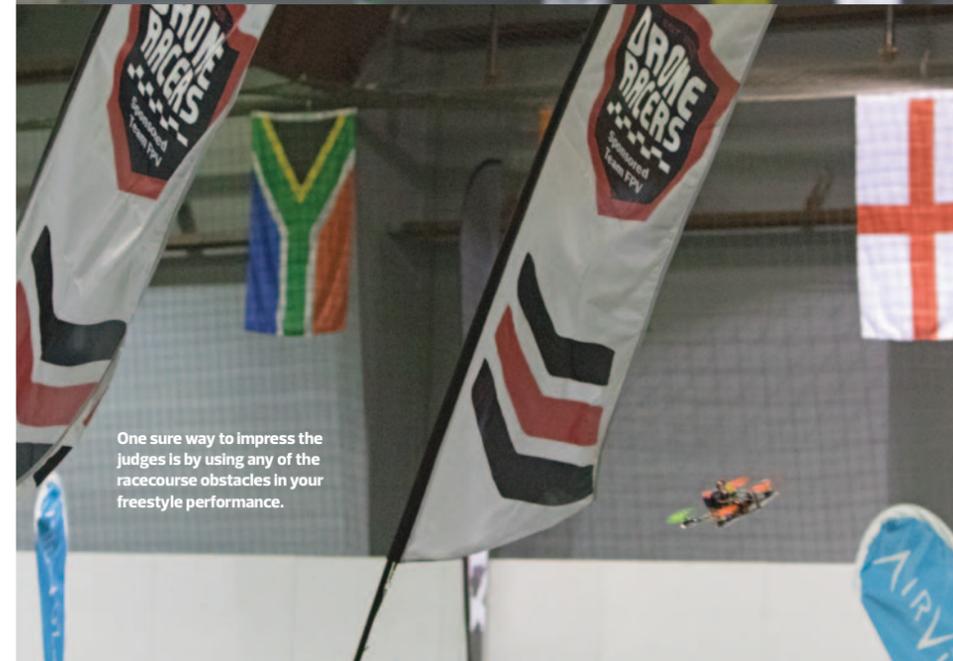
FPVR: Do you set up your drone differently for freestyle as opposed to racing?

DS: Most of the time, everybody uses the same set up for freestyle and racing, and there’s no big difference. In freestyle, you may want your rates up higher than you would in racing, but that would be the only difference. Some pilots go out there with the quad rates set up a lot faster with more expo for freestyle. For racing, they would have them set up a lot lower because they’re not performing rolls and flips during the race. But that really is about the only difference I noticed in regard to setup.

Flying close to the ground or ending your maneuver near the ground will generally receive more points.



Low ceilings and tight spaces force freestyle pilots to pull in their performance routine.



One sure way to impress the judges is by using any of the racecourse obstacles in your freestyle performance.



Close quarters and high speeds make indoor courses difficult to navigate.

FPVR: How often do they have freestyle events? Are they always with the racing events, or are they ever by themselves as a separate event?

DS: There has been a freestyle event at every race that I have gone to. But they don’t take it as seriously as the racing. At most events, they race most of the time and have a freestyle competition at the end for a few of the pilots who want to compete. Generally, this is a lower number because not all the pilots who are racing want to do freestyle.

FPVR: So freestyle can be held indoors or outdoors depending on the race?

DS: Yes, if the race is held indoors, then the freestyle will be held indoors. I have been to small indoor tracks and there is not much area to fly in, but you still have to do freestyle there in the track area. In small spaces like this, freestyle is a lot more challenging and requires you to be very fast on the sticks.

IN SMALL SPACES LIKE INDOOR TRACKS, FREESTYLE IS A LOT MORE CHALLENGING AND REQUIRES YOU TO BE VERY FAST ON THE STICKS.

FPVR: What do you think about the freestyle held in Dubai?

DS: At that one, you could do the freestyle with or without the goggles. So some competitors flew line-of-sight freestyle. If you fly line of sight, you can do a lot of crazy things with the quad, like fly backward. You can let it drop extremely low and then do a flip because you are able to see just how close you are to the ground. This makes it more exciting for everyone, including the judges. When you are flying with the goggles, you can’t really have that degree of precision to fly that low or fly backward—you would actually be doing that blind. As a result, your maneuver would not be as good as flying with FPV as compared to the people who fly line of sight. I think it’s a disadvantage to the FPV pilot if you allow line-of-sight flying at an event.

FPVR: Has anyone tried using the quads with reversing motors for freestyle?

DS: Using reversing motors and performing 3D maneuvers with goggles would be rather hard to do. I think that would be better suited for a line-of-sight aerobatic competition.

FPVR: How often do you practice for an upcoming race?

DS: Well, I don’t really practice for any freestyle event. I just let it happen, and sometimes I may practice when I get there. But I don’t really do anything different before the event. I don’t have a sequence that I fly; I just do what I want at the time, so there is nothing to really prepare for.