Radio Control Flyers Unlimited

Flight Plan

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Current News

We will be having a field clean up day on April 23, 2016 starting at 8:00 am. This will be on the same day of the April club meeting.

Letters to individuals, that have stated last year, to loan the club monies for the paving project have been sent out. Of the letters sent, requesting the money, only 4 loan checks were received for the paving project, 4 more are needed to proceed with the project. If anyone interested in loaning the club money, a copy of request letter is available on our website, or contact any one of the club officers.

As a reminder, as stated in the field lease document, overnight camping at the field is only during Special events. Proper notice must be given to park staff, and a fee of $15.00/ vehicle must be paid for overnight camping. Please contact a club officer to schedule camping at our site.

We are getting an ”Emergency care” poster with telephone numbers and route to nearest hospital being created. I will be a great help with somebody get hurt or is in need of urgent care.

We will be having a fun fly at the field. This will also include the monthly club meeting, pilots safety meeting, and late lunch/early dinner. We will have the fun fly at about 4:00 pm and a night fly when it gets dark

The pylon races have been scheduled for May 14-15, 2016 and August 13-14, 2016, The August date is a change from the original September 17-18, 2016 date. This event requires a few volunteers for both days. I have volunteered at the last pylon race as a judge and was actually fun to do. Please plan to help out during this and all other events at the field.

There will be an IMAC aerobatic contest on June 25-26 2016. We will be having lunch there as well. Volunteers would be much appreciated to help out.

PILOTS CORNER

FPV Drone Racing
PC World by Chad Kapper

Imagine a first-person-view video game where you’re racing through the air and dodging obstacles. Losing even one-tenth of a second can cost you the race. Now imagine that it’s not a video game. This is the sum-total experience of first-person-view (FPV) drone racing. Drone racers see all the action from their drone’s perspective as they weave through the air at upwards of 70 miles per hour. And it happens in places that were previously physically impossible to navigate.
Drone racing can be a bit intimidating, but I’m here to help. I’ve spent the past five years as an R/C flight enthusiast, and I founded the popular community and YouTube channel Flite Test in 2010. More recently, my feature film, Rotor DR1, features a drone race inspired by our community before FPV was

even “a thing” (you can find it on Hulu here).

Through these endeavors, I’ve had the pleasure of spending time with the world’s best FPV drone pilots. They’re all eager to help with advice for new pilots, so let’s dive straight into the five most important things a beginning drone racer needs to know.

Do your homework
Start by doing research. YouTube channels like CharpuFPV and forums like RCGroups and Flite Test are great resources for beginning flyers. You can also visit your local flying field, and just start asking questions.

“FPV is very community-based,” said Steele Davis, runner-up in the Freestyle competition at the Drone Nationals racing event. “If you have buddies who you’re competing against, you end up getting better faster than you would if you were just basing your stuff off of the pros.”

Pay particular attention to anything about flying R/C safely. It’s easy to forget about safety and just go out and fly anywhere. But because understanding the parameters of safe flying is so crucial, even the pros will emphasize its importance.
“Safety is one of the most important things,” said Carlos Puertolas, a professional drone racer on Team Lumenier. “We’re so much in the eye of the public, we have to make sure we’re doing it correctly.” Indeed, the biggest mistakes newbies make include flying in populated areas, or flying too far before understanding how to properly control the aircraft.

Research is also important in order to spend your money wisely. Most racing models are quadcopters (four propellers) or hexacopters (six propellers), and measure 250 millimeters or less between the two propellers furthest from each other. Models are also commonly referred to by their size or class (250, 180, etc) and number of propellers. But that’s just the short story on equipment. You’ll want to research all your options before spending a dime.

Start small
After researching, get hands-on experience by flying with friends, or using simulation software. FPV Freerider is an excellent free option. You should also check out the upcoming game called Liftoff, which promises an accurate flying experience based on real-world models and physics. It’s being developed by two industry leaders, Immersion RC and Fatshark, in collaboration with LuGus Studios.

If possible, fly with experienced friends so you can “buddybox” for interactive feedback. This flying technique allows you and a friend to connect transmitters, so if you get into trouble, your more experienced partner can take over the controls. If you’re looking for friends to fly with, forums, YouTube, the Academy of Model Aeronautics (AMA) Magazine, and Flite Test are great resources.

As for the hardware itself, you should invest in a small, inexpensive, FPV ready-to-fly multirotor. Not all FPV models are meant to be raced, so do some research to find a model suited for racing. Drone Proz has a lot of great FPV racing options, including small quadcopter models. But regardless of what you buy, your first drone shouldn’t cost more than $150, whether you’re buying a ready-to-fly model or a DIY kit. Personally, I learned by flying a Blade Nano QX through my basement. This quadcopter is a great option for beginners, because it’s nimble and gives you a racing feel on a much lighter, smaller scale.
Learning this sports takes a lot of trial and error, and it’s important to keep flying until you feel comfortable. When you can fly a Nano QX FPV through a series of 18-by-12-inch gates (stationary obstacles placed around the course to keep pilots on the track), you’re probably ready to move to a more serious model like the QAV 250.

Build your own
Building an aircraft helps you understand how the aircraft does what it does, and, more importantly, it helps you learn how to repair it. Right now, I’d recommend starting very small with a

180mm to 250mm size drone, because the smaller the aircraft, the more durable and less expensive to repair it will be. However, the industry is changing rapidly, and every-day more options are available.
Start by picking a popular frame and going with a proven, tested setup. Forums are a great resource for finding successful setups. ImmersionRC and Team Black Sheep both have racing setups available to buy: the Vortex and the Gemini, respectively. The Vortex is already assembled and needs minimal assembly, while Team Black Sheep's Gemini has detailed build videos available to help with assembly. If you're going with a different frame and setup, BorisB's blog on RCGroups, Flite Test, and YouTube are great resources for build videos, blogs, and articles.

"My advice is to get in cheap and learn a bit about how to build your quad and tune your quad," said Anthony Cake, head of ImmerisionRC. "Buy a recommended frame and recommended components. Forums are a great source of advice. Put it together, build it, and get help from an expert to tune it."

Don't be afraid to crash
Flying is crashing, and repairs are a huge part of drone racing and the FPV hobby. Crashing will help you learn from your mistakes, find the limits of your ability, and find your aircraft's ability. Plus, the more you crash, the better you will become at repairing your aircraft. I'm not encouraging you to focus on crashing. I only want to express the importance of pushing past your fears.
"Buy a frame that will take a beating and crash over and over and over, and cost you very minimally in terms of repairing," says FPV pilot Tommy Tibajia. "When you can do that, you can fly less conservatively and be more confident about your flying, knowing that you can push yourself to the edge a bit more each time."
"Practice, practice, practice," said Chad Nowak, winner of this year's Drone National racing and freestyle events. "Don't be afraid to crash. The less scared you are to break something, the more likely you are to try new things. When you try new things, you'll make mistakes, and learning from your mistakes is how you improve."

Finally: Just compete
Competing pushes you to the next level. Racing events are becoming more and more common, and there are events for all different types of skill levels. Some great resources for drone racing events are RotorSports, Aerial GP, and MultiGP. MultiGP is especially helpful for those just getting into the hobby, as they have FPV racing classes, social fun flys, a dedicated forum, and chapters all over the United States.

It's important to have equipment that's durable and you're comfortable flying with. As you race more and more, you may want to modify your aircraft. I'd strongly recommend only changing one parameter at a time if you decide to modify your aircraft. This will help with troubleshooting if the performance gets worse—you'll know exactly which part is the culprit.
"Find something that works and once you've got it working nicely, stick to it," says Tommy Tibajia. "And stick to it for a long time until you've gotten very comfortable with it and you know how it handles, and how your stick handles it. And only change one thing at a time."
In the future, I think drone racing will rival the X Games in popularity. No other sport provides a virtual reality experience within the real world, and the technology is getting better every day. High-performance FPV is unique in the way it brings the intensity of gaming into the physical world.

The April Club meeting is scheduled for:
Saturday, April 23, 2016 at 10:30 am
at the club flying field.