



IN THE WINNER'S CIRCLE

Eight top racers tell all

BY DAVID STOCK

Fresh off the back of the biggest ever Drone Racing event in Dubai and with numerous leagues, competitions, and events to come, it seems like drone racing is here to stay. And like other elite sports, big-name pilots are emerging, wowing the crowds with their top-notch skills. But what does it take to fly with the best? What's the lifestyle of a top pilot like? And how can we mere mortals join those elites, traveling the world with little more than a pocket full of propellers and the hunger to win? I caught up with eight of the world's best pilots to find out more about the passion, camaraderie, community spirit, and adventures of these FPV adrenaline junkies.



Steele Davis, aka Mr. Steele

Location: Atlanta, Georgia
Age: 26
Years flying: 2
Years racing: I try not to race much; freestyle is my thing
Favorite racing quad: Impulse RC 5-inch Alien
Radio: Taranis Plus
FPV goggles: Fat Shark Dominator HD V2
Team: Rotor Riot
Day job: Full-time Rotor Riot pilot

Steele Davis, known more formally on the FPV circuit as Mr. Steele, is an inspiring pilot whose distinctive 'stache and infectious laugh usually precede him. "I'm not hard to spot," he explains, when arranging a meeting, "mustache and laughing loudly every day, all day." And sure enough, he does seem to be having more fun than anyone else trackside, which is some achievement. While not a straight-out racer—he sees himself as more of a freestyle competitor—he is still fast on the track and, alongside FlyingBear, rekreK, and others, competes in the Drone Racing League events as well as club, national, and international race meets. His freestyle skills won him second-place trophies at both the World Drone Prix in Dubai and at the 2015 U.S. Drone Nationals in Sacramento, California. He is a member of Team Rotor Riot, a collective of pilots that includes Davis, U.S. drone-racing champion Chad Nowak, fellow DRL pilot Tommy Tibajia, and FPV legend Charpu. While they compete at big events, including the World Drone Prix, under Rotor Riot, the team was created primarily to produce a series of YouTube films that showcase the lifestyle, personalities, and epic escapades of four young, fun-loving pilots pushing the limits of their hobby and inspiring a new generation of pilots to get into the sport. "Rotor Riot is recording what most people end up achieving when they go out flying with friends: really enjoying themselves. We're trying to encase that in a show," says fellow Rotor Riot pilot Chad Nowak. Alongside episodes that showcase the best flying in stunning locations, the four pilots also undertake a series of drone-based challenges, including one in which they try to outmaneuver a team of trained armed police tasked with shooting their quads out of the sky.

How did you get interested in flying quads, and how did this evolve into drone racing?

I got into flying RC helicopters, and in trying to learn more about that discipline, I stumbled across the flight-enthusiast website Flite Test and then found out about FPV. That changed everything, as the only way to truly have a great time flying close-proximity FPV is with a small, nimble multirotor.

How many hours a week do you practice?

I try to get around an hour of actual flight time a week—roughly 15 to 25 batteries a week at three minutes a pop. Lately, I have been flying a lot of fixed-wing 3D foamies, which have a longer flight time.

Do you have any particular strategy or style?

I enjoy technical combo maneuvers, and I also love making videos. So I like to fly in beautiful locations with breathtaking views and heart-stopping, no-mistakes flying.

What do you enjoy most about the sport?

The community. FPV is an RC discipline that many people get into for many different reasons, mainly because it's awesome! In all honesty, though, I have met more amazing people in this community than I ever would have thought existed.



Ross Kerker is an Australian racing pilot who has been omnipresent on the scene. He not only features at top Australian competitions, despite the races being "very small and often very far apart," but also is a top racer in the Drone Racing League series—a sequence of events held in iconic and unusual spaces across the United States, such as abandoned shopping malls or the Miami Dolphins Sun Life Stadium in Florida. Kerker is a team pilot for BoltRC Racing and Team BlackSheep, the Hong Kong-based drone supplier, representing both at the World Drone Prix in Dubai, finishing in the top 32 of 150 teams. He helped test and develop the recently released Team BlackSheep Vendetta racing quad, a full carbon-fiber monocoque design. Despite being a longtime RC fan and an experienced and skilled 3D heli pilot, he had little interest in quadcopters and drones at first, seeing them as little more than "hoverships taking pretty pictures," he says. It took hands-on experience with the then newly released Blackout Mini H quadcopter to change his mind. From then on, he saw FPV-equipped quads as the future of racing. He even sold numerous helicopters to pay for the new sport.

How did you get interested in flying quads?

At the 3D heli field where I was flying, a fellow pilot

showed up with a blackout quad. He did a demo, and after running two laps around the park, most of us were like, "Take my money!" and we quickly rushed out to buy more Blackouts.

How did this evolve into drone racing?

It was about racing from the start. From that demo, we saw the racing potential.

How many hours a week do you practice?

30+.

Do you have any particular strategy or style?

Go fast. Don't crash.

What do you enjoy most about the sport?

The friendly rivalry. We're all great friends, and we can all laugh about what happens out on the track.

What's your best FPV moment or cool story?

There are so many to choose from, but the most recent one was at D1 Drone Challenge in Ballarat, Australia, in the rookie class final. The favorite pilot went to plug in his quad, and the battery connector broke. About 10 people quickly swarmed and resoldered it for him instantly so that he could race—and he won.

Ross Kerker, aka rekreK

Location: Tweed Heads, New South Wales, Australia
Age: 30
Years flying: 6
Years racing: 2
Favorite racing quad: BoltRC Kraken
Radio: Jeti DS-16
FPV goggles: Fat Shark Dominator V2
Team: Team BlackSheep/ BoltRC Racing
Day job: Software developer

Kenneth Loo, aka FlyingBear

Location: San Francisco, California
Age: 32
Years flying: 6
Years racing: 2
Favorite racing quad: Shendrones Mako
Radio: Spektrum DX9
FPV goggles: Skyzone 3D V2
Team: AirVuz/Multirotorsuperstore/Shendrones/Spektrum RC
Day job: Mechanical product design engineer, consumer products

Kenneth Loo, or FlyingBear as he is better known, is a racer from California, who transitioned from flying RC airplanes to quadcopters, even going as far as to 3D-print his first frame. He is a competing pilot in the Drone Racing League as well as a Team Pilot for AirVuz—a company that runs a hosting platform for drone footage—and he recently reached the top 32 finals at the World Drone Prix in Dubai. Flying takes up much of his free time. “Before Dubai, I only practiced five to 10 hours per week and mostly on weekends,” he says. “Afterward, I realized I needed more stick time to compete with pilots who have gone completely pro.” Loo now practices 15 to 20 hours per week, flying after work and on weekends. Traveling is a big part of the sport, too, and Loo’s wife, Pam, can often be seen by his side. “She’s a talented photographer who travels with me to document our events and adventures,” he says, adding, “My wife is very supportive. She understands when I need to spend the entire evening in the garage and also understands when I need to practice for six hours on the weekend.” Loo will be racing at numerous events in the United States, including the upcoming Aerial Sports League event at Maker Faire and the Propsman Warehouse race, both held in San Francisco, California. Loo is aiming for the Drone Worlds event in Hawaii, too. “I definitely plan on going to Hawaii—somehow,” he says, but it won’t be easy. “The level of competition is growing exponentially,” he explains, requiring even more stick time to stay ahead.

How did you get interested in flying quads?

I originally flew RC airplanes, and then quads started appearing in the parks we were flying in. I thought they were really weird for years, but I finally gave them a try and fell in love.

How did this evolve into drone racing?

Racing evolved very quickly. It feels like yesterday that it was just a bunch of friends gathered at local parks with pool noodles for gates. Now it’s organized events with prizes, leagues, and sponsors.

How many hours a week do you practice?

As much as possible. Post-Dubai, it’s about 15 to 20 hours per week, flying after work and more on the weekend.

Do you have any particular strategy or style?

I’m a strategist, and every race has different rules. I adapt both my drones and my racing style to the event rules.

What do you enjoy most about the sport?

I love to fly. It’s liberating, exciting, and fun and satisfies my need to tinker with electronics in the garage.

What’s your best FPV moment or cool story?

The best stories are how I lost different quads over the past few years. In one instance, I was flying behind a mountain face when I lost the FPV signal, causing my quad to drop down a 5,000-foot cliff. Another time, I was caught in a midair collision with an RC plane. The quad ricocheted into the San Francisco Bay, but the plane got lucky and landed in a tree overhanging the water. Another time, I was flying around cliffs outside of Las Vegas. I flew up a cliff, did several flips, and flew back toward myself. Unfortunately, “myself” was the wrong direction, and my quad lost the RC and video signal. It dropped into an irretrievable area.

Females on the drone-racing circuit are, sadly, few and far between. But for Juli Müller, aka JuLiFPV, that shouldn’t be the case. She says, “All the girls with affinity for technology and fast vehicles should turn up and show the world how cool they are.” But entering an already-male-dominated sport can be tough. For Müller, it’s the role of the females already on the scene, like her, who can pave the way for more. “I feel great doing FPV racing, and I am treated very well and without contempt,” she says. And while some old chivalrous habits die hard—“the guys can’t restrain from holding the door open for me or trying to be good mannered,” she says—“when it comes to racing they don’t show consideration for me being a girl.” She’s quick to highlight, too, that once the goggles are on, there is little difference between the genders. “Men and women have both the same physical conditions for this sport, so they should fly together and against each other.” Only when it comes her quad does she like to be “girly” and play with prejudices and stereotypes: “It is totally pink!” she says.

How did you get interested in flying quads, and how did this evolve into drone racing?

My brother started flying a Phantom for fun. He was really proud, but I just thought, “OK. That’s boring.” As he was pretty well informed about drones, he told me about racing and FPV. Then he, my boyfriend, and I started watching all those videos on YouTube and got addicted. After some days, we ordered the first “building kit,” and the addiction began. We contacted the local team, KloPPokoPPter, and they invited us to their place, and my interest for racing was arisen. Some weeks after that, we founded our own little racing team, FPV NuTz. More recently, I was asked to be part of Europe’s all-star team, Tornado X-Blades,

to represent women in this sport. This is now giving me new perspectives, and I am very proud and glad about this opportunity.

How many hours a week do you practice?

I try to fly as often as possible, but the German weather is not the best—normally, all weekends, as long as there is no rain. I’m now in eager expectation for spring to finally arrive to be able to fly evenings during the week.

Do you have any particular strategy or style?

My strategy is just being me without disguising that, keeping calm during races, and going my own pace without being impressed by others.

What do you enjoy most about the sport?

There are two main aspects why I enjoy this sport so much. First, I enjoy meeting all the awesome and exciting people. I love the community and the international friendships it brings. Second, flying quads gives me the feeling to be free, to enlighten my mind, to be like a bird. I think the special thing is the connection of these two aspects. It gives an incredibly powerful feeling. It may sound a bit kitschy, but being able to fly and being able to fly around the world to meet all the people in this sport makes me feel alive and fills me with joy.

What’s your best FPV moment or cool story?

I recently attended a cool event in London. As an X-Blades pilot, I was invited by the European Rotor Sports Association and Qualcomm to fly at Wembley Stadium, the home of UK soccer. It was an awesome experience, and I am so happy to be part of this incredible EU team. I’m hoping for many journeys and adventures to come.

Juli Müller, aka JuLiFPV

Location: Hamburg, Germany
Age: 27
Years flying: More like months, really; started in October 2015
Years racing: First race took place in May
Favorite racing quad: A pink Beast Evo by Artfantasie
Radio: Graupner MZ-12
FPV goggles: Fat Shark Dominator V2
Team: Tornado X-Blades and FPV NuTz
Day job: Language translator



**Chad Nowak,
aka FinalGlideAus**

Location: Brisbane, Australia
Age: 37
Years flying: 2
Years racing: 1
Favorite racing quad: Alien 5- and 6-inch and Warpquad with Z-Pod
Radio: Taranis
FPV goggles: Fat Shark Dominator HD V2
Team: Team Rotor Riot
Day job: Flying FPV quads



Australian Chad Nowak shot to fame in 2015 when he competed in—and won—the first-ever Drone Nationals FPV racing event in Sacramento, California. The event, organized by Scot Refsland (who has two more huge events set for 2016, one in New York and one in Hawaii), was the biggest of its kind at the time and not only put Nowak on the map but also announced the arrival of the drone-racing concept to the public. “I went there to have fun,” Nowak said at the time, “so to win everything, I’m gobsmacked.” But for Nowak, winning there was just the start. Shortly afterward, he moved to Atlanta, Georgia, to be closer to the emerging sport, hoping to “fulfill my long-held dreams to make FPV flying and product development into a living,” he says. And he’s doing pretty well at it, too. He not only can be seen competing at race meets and freestyle competitions all over the world—including, most recently, in Dubai—but also is part of the Rotor Riot flying team, alongside other top pilots, Mr. Steele, Tommy Tibajia, and Charpu. “We’re trying to bring you our world of extreme multirotor madness and fun,” he says of their YouTube channel. For Nowak, quitting his day job in Australia’s oil industry to pursue his dream was the most liberating thing he has done. “I would never smile in my old job,” he says. “I wasn’t a happy person.” Despite being aware that it might not work out; he says, “FPV racing isn’t making me a rich person yet.” He explains, “I may end up back home completely penniless.” He’s glad to be part of this community as it grows, noting, “The last seven-odd months of my life have been an amazing rollercoaster. I’ve had more memories in that seven months than in a big portion of my life.”

How did you get interested in flying quads, and how did this evolve into drone racing?

I saw a Flite Test episode on FPV in late 2013 and instantly saw the potential. I guess it evolved into racing simply due to the fact that when you have a bunch of guys in a group doing the same thing, you will eventually have something competitive evolve. When I first started, there was no such thing as racing. We would simply just fly around together, and it would naturally lead to racing each other.

How many hours a week do you practice?

Flying is a full-time thing for me now, but that doesn’t always mean actual flying. There is many behind-the-scenes things that go on. That said, I do like to devote a day or two per week to flying and remembering why I got into it in the first place.

Do you have any particular strategy or style?

My strategy is to enjoy myself and have fun. My style of flying has always evolved, particularly with my freestyle flying, and it depends on my mood.

What is the longest distance that you traveled to attend an event or race?

How long is the distance around the earth?

What do you enjoy most about the sport?

The passion, the friendship, and the memories. The flying itself comes a distant second. The fact that I can do what I love full-time makes me very happy.

What’s your favorite FPV experience or cool story?

The 2015 Drone Nationals was the first-ever moment all of the top pilots around the world got together in one spot and met for the first time. On the last day, after the racing was over, we had a chance to drive to a random location and just fly together and enjoy being around our peers. No stress, no egos—just a group of amazing pilots sharing a worldwide passion. It doesn’t get better than that.



At 16, Luke Bannister is one of the youngest and most naturally gifted pilots on the FPV scene. Despite his age—or perhaps because of it—he has quickly grown to become one of the best racing pilots around, even though he has only been flying FPV quads for a year and a half. In March this year, Bannister and his Tornado X-Blades team outperformed 150 other top teams racing on the spectacular, purpose-built track in Dubai, winning the inaugural World Drone Prix and becoming drone racing’s first-ever World Champion. “Racing in Dubai has to be my number one experience,” he says. “It was amazing.” Despite the attention and fame that winning such a competition brought, Bannister is down to earth, and following his spectacular win, all he looked forward to was “flying in a nice, quiet, open field,” he says, overwhelmed by the attention. He also admits that he prefers freestyle flying to competitive races, which can be stressful. “I just enjoy the flying, the freedom. You are free, like a bird. It’s an out-of-body experience.” And while he has aspirations to become a professional pilot, his education takes priority; he’s currently in the midst of his GCSE exams. “Lots of people are pinning hopes on him as an ambassador for young people,” Bannister’s mom Karen Wolferstan Bannister explains. “He needs to balance going pro with an education.” He is expected to compete at the upcoming Euro Cup in Ibiza, Spain, as well as the World Drone Racing Championships in Hawaii. In 2017, Bannister will return to Dubai to defend his title and says, “I am definitely looking forward to coming back next year.”

How did you get interested in flying quads, and how did this evolve into drone racing?

I first got into drone racing a year and a half ago. I’ve always wanted to be a pilot since I was young. I was browsing on YouTube and saw videos of drone racing, and I just thought to myself, “I’ve got to try this. I’ve got to do this.” And then it went from there.

How many hours a week do you practice?

As much as I can.

Do you have any particular strategy or style?

Not really. I just fly for fun, although each race is different and you have to adapt. Normally, races are flat-out sprints, but in Dubai, for example, you had so many tactics to consider—battery life, pit stops—it’s a team effort. I had more to give, but when you start to push too hard, your batteries die. That, for me, was a matter of self-control. Usually when there is someone in front of me, I just want to catch them up and beat them.

What do you enjoy most about the sport?

The camaraderie in this sport is awesome, but the best thing is being able to fly and explore.

What’s your favorite FPV experience or cool story?

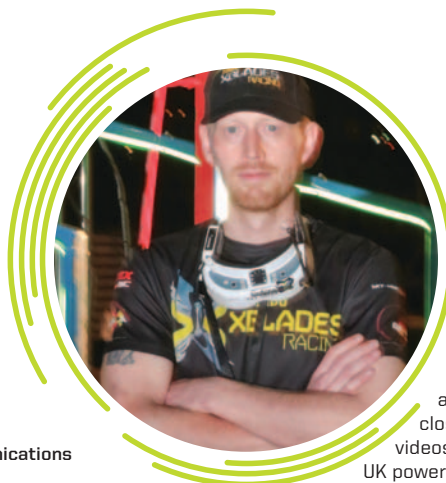
Racing in Dubai has to be my number one experience. It was amazing.

**Luke Bannister,
aka BanniUK**

Location: Somerset, England
Age: 16
Years flying (mini-quads): 1.5
Years racing: 1
Favorite racing quad: Shrike
Radio: FrSky Taranis
FPV goggles: Fat Shark Dominator HD V2
Team: Tornado X-Blades
(sponsors:) Multicopterparts/hqprops/hoverspeedrc/Team BlackSheep)
Day job: Badass!

James Bowles, aka Jab1a

Location: Devon, England
Age: 35
Years flying: 5
Years racing: 3
Favorite racing quad: Armattan F1-5 frame
Radio: FrSky Taranis
FPV goggles: Fat Shark Dominator HD V2
Team: Tornado X-Blades
Day job: Local council information and communications administrator



James Bowles is the current UK champion, winning at the first UK nationals event in Lincolnshire, England, in 2015. Hailing from Devon, James is often seen racing on the national and international scene. "I am willing to travel the length and breadth of the UK or the world to attend a good race meeting," he says. Bowles prefers close-proximity flying and produces some epic freestyle videos, including a recent one flying around an abandoned UK power station. Bowles flies with the European Tornado X-Blades team and was a technical advisor on Chi Lau's team at the World Drone Prix in Dubai. For Bowles, it all began back in 2011 when, like many others, he chanced upon a YouTube video about FPV flying. "I clicked on a video called *FPV Warehouse*. It was of a guy flying an FPV tri-copter, chasing his friend's plane around an abandoned warehouse. Once I saw that, I knew this had to be in my life." By the start of 2012, Bowles had his first true FPV flight and was well on his way to being hooked.

How did you get interested in flying quads, and how did this evolve into drone racing?

In 2014, I was asked to join a group of RC car racers who had recently started flying FPV on mini-quads and wanted to race them against each other. I didn't think I could love FPV any more than I already did, but after that day, I was even more hooked. My video from that day started to go viral, and soon I had contacts with so many people wanting to set up races in their area. The sport evolved in Europe with the creation of the British FPV Racing Association and the even bigger European Rotor Sports Association, along with championship titles, like the British FPV Championship (which I currently hold) and the European FPV Championship (expected September/October 2016).

How many hours a week do you practice?

I try to get flights in any spare time that I have, but it often depends on weather and getting that time. I take about 15 LiPos with me when I go flying and hope to fly them all. An average time spent flying per week is a minimum of three hours. If I have not flown in a few days, though, I start to get cabin fever.

Do you have any particular strategy or style?

My strategy is being consistent and ready to adapt and overcome situations at all times. It's not always the fastest racers that win the race. [Bowles was the only pilot to complete the course in the UK Nationals final, for example.] My style is more close-proximity flying, and this lends itself to very small technical courses. However, I am still quite at home on a very large fast course.

What do you enjoy most about the sport?

Fun, adventure, and adrenaline. Meeting so many like-minded people with a passion for the sport and getting to hear and share new ideas. As a community, FPV racing has some of the most intelligent and friendly people I have ever met, which makes me love this sport more and more at every event I attend.

What's your best FPV moment or cool story?

I was asked recently, as an X-Blades team pilot, to fly some locations for a promo video. This included a full day in a decommissioned oil-fired power station. We had full run of the location to fly where we wanted, including diving a 140-meter smokestack, flying down the center of a 1000-kilowatt generator, and plenty of FPV close-proximity joy.

NEED REAL NAME, aka Metall Danny

Location: Maastricht, Netherlands
Age: 41
Years flying: 2.5
Years racing: 1
Favorite racing quad: ImmersionRC Vortex Pro
Radio: Futaba T14SG
FPV goggles: Fat Shark Dominator V2
Team: ImmersionRC/Tornado X-Blades
Day job: NEED

Dutch FPV pilot Metall Danny came to the FPV scene via an unusual route. Rather than arriving from RC sports, like many others, the self-proclaimed adrenaline junkie came, admittedly rather battered, from traditional motor sports—motocross, specifically. "I crashed a lot, though," he says, "and 40 percent of my body is metal now," he explains, giving away the provenance of his FPV handle. After 25 years in the sport, he finally conceded to doctors' advice and stopped racing. When FPV racing happened, he realized that he could get the same hit from this new sport, only with much less damage to his body. When he saw a video of an Australian pilot, he thought, "Whoa, I want this, too," and got excited about competing again. Danny is an ImmersionRC team pilot and was a Tornado X-blades pilot in Dubai.

How did you get interested in flying quads, and how did this evolve into drone racing?

After 25 years of motocross and freestyle motocross, my body was played out. The advice from several doctors was that I needed to stop. I fell in a deep hole for a few years, but then I saw a video from Australian pilot, Juz70, and my brain was full of adrenaline again. Woohoo!

How many hours a week do you practice?

It depends on the weather really. I live in the Netherlands, and we get long winters and a lot of rain through the year. When it is winter, I go to an indoor car park [parking garage] two to three times a week in the night, when there are no cars. In the summer, I try to fly four to five times in a week, mostly in a forest because I'm a tree junkie—that's where I get my adrenaline buzz. Afterward, I go home happy. I don't care about the crashes or having to rebuild my quad at home. It just makes me happy to fly there.

Do you have any particular strategy or style?

I did a lot of racing last year, and I learned to fly in Save mode because I want to finish races. I'm not the fastest guy on the track because I fly with heavy setups and HD cameras. For me, winning the events is not my goal anymore. I'm always happy to be in the final race and make some awesome shots for sharing afterward. At my early events, I wanted to win everything—and I did—but I ended up pushing myself too much. And it was not fun anymore, especially for my friends, family, and competitors; I wanted to be alone to concentrate. Now, I just want to have fun and not make it easy for the rest of the racers. My adage is: Staying cool is number one rule.

What do you enjoy most about the sport?

I love everything in this sport: the adrenaline, the speed, the feeling you are really in the sky, and the community—because everybody is helping each other and helping the sport grow. I love the sound of flyby quads—it sounds like a Formula 1 car to me. I love the way new stuff comes into this world so fast. New props, ESCs, motors, flight controllers, cameras, frames, LiPos. It never stops. The last two years have been a rollercoaster. 🎢

