



July 2019 Issue

Hi and welcome to the F5J USA Tour newsletter. For details and scores from past Tour events you can always find links from the [Tour Calendar](#) page. Good flying to you!

In this issue

We start with the last *Team USA F5J* update before they head off to Trnava Slovakia (good luck guys!). Then we have two special articles by **Ali Khani** and **Justin Rizer** who each flew in European contests recently. They both paint an informative and entertaining picture of what it's like to fly in contests over there. Then we have our first installment on F5J motor Q&A with some answers from **Steve Neu** of NeuMotors.

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Tour events in August

[Tour Calendar](#)

Buzz Averill Memorial F5J, August 24-25 (Western region 2-day event). This is the 4th annual “BAM” event, details [here](#). Hosted by [Albuquerque Soaring Association](#), contest organizer is **Richard Shagam**. CD is **Greg McGill**. This event is at the world-class Balloon Fiesta Park with acres of grass and lift. The [pilots list](#) is just getting started right now so it's a great time to jump in and [sign up here](#).



Team F5J USA Update, July

by David Beach, Team F5J USA manager

[Team Website](#)

World Championship event: August 12-16, 2019 in Trnava, Slovakia



It's almost time for the big show! In just about two weeks time the USA's best F5J pilots will have the opportunity to demonstrate the results of years of practice and months of preparation for the first ever FAI F5J World Championship. Several of the pilots have publicly shared images of the models they will be flying. Others have been quiet, and have a surprise or two to show at the competition.

I'll be posting to the [Official Team thread on RC Groups](#) on a regular basis through the pre-contest and championship rounds, so check in there for the round-by-round news. The [home page of the team website](#) will also get daily summaries and be sure to visit the [Team Fund Donation Page](#) while you are there.

Vince Lombardi said "Perfection is not attainable, but if we chase perfection we can catch excellence".



The USA F5J team is going to Slovakia to chase perfection, and doing so on the heels of the outstanding performance of the **2019 USA Hand Launch team**. The junior team made it to the podium with a 2nd place finish in the preliminaries. The senior team

finished 5th in the prelims. The US was represented by two juniors and two seniors in the finals. The whole team deserves congratulations on a job well done, and a special shout out to **Noah Meyers** and **Toby Herrera** for their 3rd place finish in their respective divisions.

Team F5J USA will be chasing perfection soon, and will be doing their best to excel. Again I want to thank our team sponsors and individual contributors for your support.

David Beach
Team F5J USA manager



So you want to fly F5J in Europe?

by Ali Khani, [FlightComp](#)

In June I took my third trip to Europe to visit vendors and fly in a few F5J contests. I am up to 7 European contests under my belt now so I thought I would give the average American pilot a taste of what it's like.

Obviously you need to transport your models with you. My first few trips I had to take two-piece Pikes with me, that meant lugging around a really long and awkward box. I believe it cost me \$400-500 additional to my ticket for each trip. Luckily these days we are seeing models that break down into a smaller package. My last trip with two Vertigos cost me \$180.00 on top of the standard ticket price. Don't buy a ticket and just show up with your model case! You will



get charged extra and it will be a higher price than if you had worked it out with the airline ahead of time. Call a few airlines before you buy your ticket and ask how much extra for your case. You may find you save money by choosing a more expensive ticket that has a lower fee for your case.

So talking about a case or box, you will need a really strong one! Cardboard won't cut it and some airlines don't take raw untreated wood cases. Plastic is best! The first case I used I made myself and it is a thing of beauty! (picture [here](#)) I think it could survive going over Niagara Falls! I made it with sign plastic, I used it for 2 trips but opted to order a custom made case for my last trip that was shorter and lighter. Both cases feature strong hinges, wheels, handles, and locking latches. All things you need for international travel. When you pack your models in the case make sure to make them



as easy to remove and replace as possible! This way if someone does inspect your case the risk of damage is smaller. I typically pack my models with my clothing, or use my clothing as padding. **(Pro Tip- leave a few pieces of dirty underwear on the very top before you close the lid.** Nobody wants to rummage around in dirty

underwear!) This way I don't need to check in any other baggage. If you do make a case or order one, get it in white! Black cases get really hot and I've seen them bend and warp in the sun at contests. Typically I travel with a backpack and transmitter case. I have never had any issues with bringing a transmitter on the airplane.

If you have to bring your flight packs, you must carry them on the airplane. However I advise making arrangements ahead of time and having 2-3 lipos waiting for you somewhere in Europe. It really cuts down the hassle you get at airports. For my last trip I just asked a friend in Europe to order 3 batteries for me. I left the batteries there when I came home.

Making arrangements in Europe for hotels and cars is pretty straightforward. I usually rent a car and pick it up at the airport. If you don't drive stick you may be out of luck as that is all you are likely to find. I recommend reaching out to local pilots to help you get a hotel room. You can find things online but often the more convenient choice is not so obvious online. I'm lucky in that my vendors generally help me find accommodations or offer to put me up for a few nights. I've found that most contests are held in rural areas with small towns. These towns have several small hotels, some above bars and restaurants. In general they are very nice, clean, and super cheap! Typical fair is about \$40.00 a day. I stayed in a really nice hotel in Czech on my last trip. Great restaurant, gym, pool, and a nice room. All for about \$50.00 a night. In the end it doesn't really matter because you will spend most of your time on the field.

Expect everything to be really cheap unless you happen to find a 5J contest in Berlin or Paris. Great meals for \$5.00, beers for under 2.00, affordable hotels. Really the most expensive part is the airfare. After that it's actually cheaper than traveling to a US contest.



It's sounding really good so far right? Well hold on there speedy! There are plenty of

downsides! First off the roads are small with very few highways. It may take you 3 hours to travel 70 miles. You can't really get anywhere fast or direct. You will be cutting through small town after small town with really slow speed limits. As well all the big trucks that carry freight all through Europe are using the exact same roads!

Now that you finally arrived at the event you may be thinking, it's going to be a blast! Everyone is going to welcome me and want to talk to me, right? Nope. Nobody cares. You are on your own. I've found the majority of people don't go out of their way to welcome the new odd American pilot. This coupled with the central European personality can lead you down a road of extreme isolation. Each time I went I already had contacts there and I still felt like an outsider. Most people over 40 don't speak English anyway. The younger pilots do, but they don't really attempt to talk to you.

Finding a timer can be really hard. Especially a good one that can call air. Most of these guys are already working with other people. So now you have to find a timer that speak English, call air, and can count down the clock for you. I've had many experiences where the timer couldn't give me the right calls on air or time because of language barriers. Most Europeans count up as well.



So where is that LED board with the clock and the awesome voice announcing system we are used to? Most likely nowhere to be seen. Most of the contest I have flown in have had a very tiny clock and no voice announcements. No name call-outs, no time left in the round call-outs. Spoiled aren't we? If you are lucky you get the last minute

announced. Sometimes all you get are beeps: a beep every minute and a series of beeps in the last minute.

Get ready to fly a lot! Just kidding. Get ready to sit around a lot! Most F5J events in Europe have more than 60 people in them. Typically you get 6-8 Prelim rounds. That means you are not doing much the majority of the time. I've had several contests that were canceled due to rain or high winds so weather is a factor as well. There is nothing

worse than lugging all your stuff half way across the world and only flying 1-2 rounds because of weather.

So what's the skill level like? Are all the Europeans way better than American pilots? I don't think so. I would say 50% of the pilots are just there to hang out, camp, and drink. Flying is just secondary. 20% are very competitive and highly skilled. The remaining 30% are average or trying to improve. If you get into the fly-offs in the US on a regular basis, there is nothing to stop you from getting into the fly-offs in Europe. That is, if you can get some good timers in your Prelim rounds. I know we see videos of these guys launching to under 10 meters, etc... but honestly I have never really experienced that. Most of the events I have flown in have been windy and challenging and punished those that took low launch risks.



Now I must come to the most important detail about flying in Europe. No ice! That's right, none. You won't see many coolers and if you walk up to the food stand/beer stand you won't see any ice there either. Sounds strange I know, these guys love drinking warm soda, beer, water, etc... A minor detail you say? Well on the third day of 85 degree weather and extreme humidity you might just give up your left kidney for some ice! How about nice warm beer to cool you down? Talking about beer, it's everywhere. 9am and some folks are drinking beer. Noon and people are taking shots. It's not everyone, the guys that came to win save the drinking for after the flying. However at least half the pilots are drinking throughout the day. Something you don't see in the US.

Another big difference from a US F5J is that most of the Europe people camp at the field. After the contest you start seeing people cooking, grilling, and of course drinking. This is generally the time people loosen up and start talking to you. You will be offered an endless stream of drinks, beer, vodka, whiskey, schnapps, and other types. Let me tell you the pressure to drink is real! No is never taken as an answer, the only way to get out of drinking is to leave the field, but I never refuse! This is the time you are going to break down barriers and make friends! So eat drink and be merry! Just remember, you are going to have a hangover in the morning and nobody else will! Many a time I have had a nice hotel room waiting for me but have woken up in the back of the car with the worst hangover possible.



Reenactment of Ali's last European hangover

I may not have painted a really rosy picture of what it is like flying in Europe. However it is the truth! It can be really rough if you are traveling alone and don't know anyone. It's going to make flying the event really hard. It's hard to focus on flying when you can't understand your timer. I would highly recommend you travel in a group of 3 or more pilots. This way you can try to time for each other as the odds are low you will all be in the same rounds. Now I'm a single dude, but traveling with a wife or girlfriend would also make it easier. Sometimes you just get really sick of not talking to anyone. The people in Central Europe are great but they don't really have that "make someone feel welcome" mentality that we Americans have, that is until they really get to know you!

I have some really great memories and experiences from my trips. After flying 7 events across Czech, Slovakia, Austria, and the Ukraine I have finally managed to make some friends and feel more comfortable. Many of my best memories are not even from the contests. If you do go to fly in Europe be sure to take time to explore the beautiful countryside and small towns. It's soooooo much nicer and cheaper than doing the tourist thing in Western Europe.

To sum up, flying in Europe is amazing! I say go for it, but bring some buddies and or loved ones with you! It's an experience that is well worth the effort if you plan it right and have the right frame of mind. I actually feel that in many ways we are really lucky here in the US, especially on the west coast. We have plenty of events that are easy to get to. They are well organized and have a great timing and announcement system. The best part however is all the flying! We typically fly 12-14 prelim rounds! How lucky are we? I wish more Europeans would come out and fly with us, I think they would have a blast. I'm certain that some good old American hospitably would insure that!

I'm looking to new horizons now and have an eye on South America. I hope to fly 5J outside of North America and Europe. We shall see what adventures await me next summer!



Who's coming with me?

F5J Contest Report from Larissa Greece

by Justin Rizer (Phoenix)

This year I traveled to Larissa, Greece, which is 3.5 hours north of Athens to compete in an F5j contest. This desire to travel ½ way around the world to fly in a 2-day contest was formed by a befriending of a gentleman, **Pantelis Danavaras** on Facebook in the Explorer group. Roughly a year ago he invited me to come and attend his contest, so I



requested the time off for vacation and would bring my fiancé (by the way, she wouldn't let me go without taking her). Once we both had the time off, the logistical part of the trip planning began. I knew from my experience last year traveling to a contest in Cordoba, Argentina, that the preservation of the gliders was of utmost importance. I contacted **Rick Miller** at Pack-Lite and had him custom make me a travel box, which included roller wheels, custom lay-flat latches and other neat features. Hotel arrangements and car rental arrangements were made relatively quickly on-line, thus it was a matter of waiting for the day of travel to arrive.

We departed Phoenix bound for London on June 4th, arrived London the 5th, changed from American Airlines to Olympus Airlines, and was bound for Athens that afternoon. I did check on the condition of the gliders in London, as we had to change terminals, and the gliders were so far unscathed. Once all our bags were checked in at the Olympus ticket counter, we were on our way to Athens. Side note: my glider box did not get checked in directly at any of the main ticket counters. Once the gate agent "tags" the box I have to roll the box over to the "oversize baggage" section where they take it away from me, x-ray it and send it to the plane

We arrived Athens about 5pm and secured our rental car. European cars are much much smaller than American cars so make sure all your stuff can fit inside the car. We

almost had to get a bigger car, and to say my fiancé was cramped is an understatement, but she's a trooper and made it work. We arrived in Larissa around 11pm and immediately went to bed.



I awoke the following day around 1pm, gathered my thoughts, glider stuff, headed for the car and the flying field. The field was a mere 20-minute drive into the country side, only the last part being on a dirt road surrounded by farm fields. Once I came upon the flying field it was apparent that this was a serious flying field, as they had an air-conditioned club house, two-bathroom facilities and several shaded permanent areas. I found and introduced myself to my

friend that I had met on FB over a year ago and we both chatted for a while.

I began putting my models together and test flying the air and surroundings. I was still fairly jet lagged so after about 4 hours of flying I called it quits. I stashed my gliders in a small hangar and headed back to the hotel for rest and dinner with my lady.

Friday I was able to get up a little earlier (10-hour time difference) and head to the field for more practice. It was this day that I met **Arijan Hucaljuk** (team CRO), **Sebastian Manhardt** (GER) and several of the Team Bulgarian guys like **Sotir Lazarkov**. I also met a couple of really cool Dutchmen that were just an absolute blast to fly and hang out with.

Contest started Saturday morning, with calm winds, good lift and warm temperatures. In true European fashion there didn't seem to be any urgency to start the contest on time and get as many rounds in as possible. I won't bore you with a round by round synopsis but I flew extremely well (see qualifying round scores [here](#)). However it's very hard to win a round when you have some of THE best pilots in the world flying in your rounds. Additionally, it was rumored that Arijan and Sebastian made a side bet to not launch higher than 35m every round, which I believe they did. The flying conditions did support this, but still come on. Watching these guys fly was like watching Picasso paint, steady, effortlessly and never got nervous. If this was any indication the level of competition at the worlds, it will be very interesting to see who wins. I will just say this, it was truly "amazing" and eye opening to watch them fly.



We got 6 rounds in on Saturday, which was okay as the heat and humidity really came up and our timers were suffering in the heat. I was at a slight disadvantage in several rounds as I did not have someone to call or time for me, as we had official timers, but still not the same. The timers usually didn't speak English. After day 1 I was in 10th place and was very pleased with my flying. The only thing I had to do or could do, was launch lower. To give you an idea, Arijan had a 9m and a 15m launch and of the 8 prelim rounds had seven 1000 scores and one zero score. See the score card and look at the top pilots scores in the prelims.

Day 2 began and I had an idea of what I needed to do to make the fly-offs, but in round 7 I had both Arijan and Sotir (I believe that's who it was) so I knew I wouldn't win the launch height part and launched to an overly comfortable 143m to get my time and landing. Round 8 I finally decided to seriously analyze the scores and determine what I needed to do to make the fly-offs, as at this point I was in 9th place and very close in points to 8th place. Unfortunately, my analysis was too late. I flew my brains out had a 9:53, 54m, 50 and ended up missing the fly-offs off by 52 points. The "kid" (Christos) in 8th place is only 10 years old and the son of the NAN dealer. He was impressive to watch fly, as he flew with a lot of maturity and experience, but still, I got beat by a 10 year old, ugh. Alas no fly offs for me. As I reflect on my scores, that is the best, most consistent I have ever flown. Flying with world class pilots really makes you dig deep and fly even better.



10 year old Christos beat me!

I was able to time for a local guy in the fly-offs; he did not do well but we still had lots of fun despite his performance. The award ceremony was held, and the local news station showed up and began interviewing some of the local and foreign pilots. I may or may not have had to give a TV interview as I was the lone American at the contest. I was forced to give the interview I tell ya. 😊

After the contest, vacation part 2 began as my fiancé and I began our journey around

the beautiful country of Greece. We drove north and climbed most of Mt. Olympus, then drove south and spent 3 days in Athens being tourists. The people and food were exceptional, and clearly the early Greeks never envisioned there being cars, as the roads were very tight which made driving interesting (maddening).

If you have the time, and the means, I highly recommended combining a long vacation with a flying contest overseas. It really is a great way of combining your love of flying and visiting faraway lands.

Where will I go next year????



F5J Motor Q&A

With this article we start an occasional Q&A series on motors for F5J planes. One of the most-asked question areas from guys starting out in F5J is what motors, props, and ESC's they should be running and how do they set them up. And even experienced F5J pilots often still have open questions about power system components. Our goal with this Q&A series is to present tips and info that helps to make this process more deterministic.

This month's answers are provided by **Steve Neu** of [NeuMotors](#). Thanks much Steve for your inputs.

Motor Q&A with Steve Neu

Q1. To preserve a motor's rated lifetime how much excess power (amps) can a typical F5J motor withstand under repeated 30 second launches? I see guys on RC Groups suggesting that running a 450w motor at 600w in F5J is "fine" because our motor burns are short duration. Are there long term risks of magnet and/or winding damage by doing this?

Answer:

The limits are thermal —the better motors will have at least 150°C magnets and magnet wire insulation. Generally if the motor case stays below 100°C you are reasonably safe—above that you are risking a failure. One important thing to note is that the guys that venture well above the safe limits are on the back side of the efficiency curve and while they increased the power by 150 watts into the motor the actual increase in power out likely is only 50 watts— with the rest turning into heat.

Q2. If you use an over-sized prop and simply reduce the motor control signal to keep the motor's power at the specification limit, aside from generating more ESC heat are there any other downsides to doing this in terms of motor performance and rated life?

Answer:

People that use the throttle to limit the power to a “safe level” are playing with

fire—and that is not a joke. The peak current that the motor/controller sees will not be lower—only the average current and that is not what causes controller/motor failures. Very bad idea! The only way to safely play this game is to oversize the controller/motor.

Q3. For F5J motors that are intended for 3S voltages what are the downsides of running such a motor on 4S and using a much smaller and lighter prop? Smaller props are likely less efficient but is the difference likely to be significant?

Answer:

No real issue as long as the prop size is reduced to keep the current within safe limits. You gain motor power but the prop efficiency will be lower with the smaller diameter. In my opinion the prop weight is of little consequence to the total package so if a couple grams is important then go ahead—but I would not do it.



Low Launch Challenge top 3 at Santa Margarita (Fri July 12): **#2 Rick Johnston** (15.6m) handing all the cash to **#1 Ali Khani** (15.1m) with **#3 Bob McGowan** (18.4m) joining in.

ANNOUNCEMENT: North/South F5J Challenge

The 1st annual North/South Challenge is all about bragging rights. Each pilot signs up for the North or South team—pick your team regardless of your geographical location. The 2-day contest is an [F5J USA Tour](#) event that will count toward season points. No fly-offs, one discard spanning both days. The top pilot scores from each team (# of scores TBD) will be combined at the end to determine the winning team. A perpetual trophy goes to the winning team to be held for the season as proof that their team is The Best!



When: October 26-27 2019

Where: CVRC field, Visalia CA

Who: Open to all US pilots. You must be an AMA member. Planes and limiters must adhere to the [F5J USA Tour rules](#).

Cost: Free to sign up for a team. The contest fee will be in line with other 2-day Tour events.

The North and South Teams: Pick your team via the “Team Signup” button below. Note there is no geographical requirement for signing up for a particular team—you pick the team you want to compete with.



FOR MORE INFORMATION:

[N/S Challenge Info](#)

NORTH/SOUTH TEAM SIGNUP:

[Team Signup](#)

(need a minimum of 25 team sign-ups to make this event happen)

About the Tour's Advisory Group

This group is responsible for managing the Tour and includes the following key supporters and pioneers of USA-based F5J: Lee Wolfe, Steve Neu, Lenny Keer, Larry Jolly, Jim Monaco, David Beach, and Chris Bajorek. Each advisor brings significant experience and energy to this group. If you have suggestions or feedback feel free to contact any of us directly, or you can send an email to Chris Bajorek [here](#).

