



# WaterFlying

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## SCODA SUPER PETREL A Pair of Water Wings



Russia's Seaplane Solutions

The Junkers 'Metal Marvel'



# A Search for a Flying Boat Leads to Russia

*Discovering a world of design ingenuity*

Story and photos  
by Michael Smith

A scenic view of a wooden building with a deck overlooking a lake and mountains. The building is made of dark wood and has a balcony with a railing. The lake is calm and reflects the sky. In the background, there are mountains and a small boat on the water. The sky is blue with some clouds.

“You are going to Russia to test-fly a plane? Is it safe?”



They could have meant the plane, or just visiting the country generally, but, fuelled by the niggling tales of negativity seen on the evening news, there was a high level of concern among the few with whom I'd discussed my impending research trip.

One thing I've worked out along life's journey is that trepidation generated through preconceived ideas can shepherd you away from great opportunity. It's partly why I never told anyone I was heading off to London, let alone the world, in my little Searey; I was worried I'd be told I was a fool and be psyched out of going. (See "Around the World in a Searey. Yes, a Searey." *Water Flying*, July/August 2016, page 16.)

After the circumnavigation in *Southern Sun*, the Searey that proved to be a tough little plane, I realized that if I was being honest to myself, I was lucky to have made it home. As much as I love her and she saved my life, I knew that future missions would need a bigger, more suitable aircraft. Toward the end of my journey I'd made a list of the key attributes required for the next *Southern Sun*. I knew I wanted to stick with a flying boat that also had:



A stirring painting in Samara of the glory days of Mother Russia.

- Two engines
- Diesel power
- 120-knot cruise speed
- Four to six seats
- Long-range built in fuel tanks
- All composite construction
- Capable of salt-water operations

I had already looked all across the world and believed that such an aircraft didn't exist. The closest I came was the fantastic Gweduck, but she was larger than I needed and beyond my budget. I looked into having it built as a one off but, frankly, it would be a scary exercise fraught with danger. My concern wasn't just knowing that it would be an enormous project, but as Donald Rumsfeld had once said, the biggest issue would be the unknown unknowns—the things I didn't even know I didn't know. That certainly was the case for much of the round-the-world flight.

I traveled to Oshkosh to conduct research. There was some hope on the diesel front with Superior working hard on the Gemini engine, but it still seems to be years away. I spoke to some aircraft engineers who pretty much scoffed at the idea. Then I stumbled across a very rugged-looking three-seat amphibian from Russia on display, looking like a more agricultural version of a Searey. Talking to the builder using a mixture of English, Russian, and gesticulation, and looking at a brochure, it seems they also have a twin-engine aircraft. They appear to take salt water seriously, and



Dmitry, creator of the L42, L44, and upcoming L72.





Sleek, modern all-composite twin Rotax engine flying boat, in the heart of Russia.

while pretty rugged and simple, maybe it would be a step.

On returning to Australia I searched for any information I could. I learned that they are being built in the city of Samara, east of Moscow on the Volga River. It looks to be a hub for water flying, and specifically flying boats. Following ever-expanding YouTube links, I found three different companies building all-composite amphibious planes in one town in Russia. I was intrigued, and keen to visit to discover them firsthand.

On receiving an invitation from the Royal Aero Club to an awards night in London, I knew I had the perfect opportunity: return home from London via Russia. Emails were exchanged, and Dmitry, from one of the manufacturers, would collect me at the airport. They had arranged for me to stay at the hotel right on the airfield where the planes are built. This was sounding both interesting and pretty serious.

I was met at the airport by Dmitry, the owner of one of the factories. He spoke limited English, but far better than I speak Russian. With him was Valentine, who spoke very good English and was an aeronautical engineer. On the way to the field he explained that Samara is the "home of flying boat design in all of Russia," proudly adding that it "also is home of Russian rocketry; we built rocket that took Yuri Gagarin into space."

As the explanations unfolded, I learned that Samara University has a

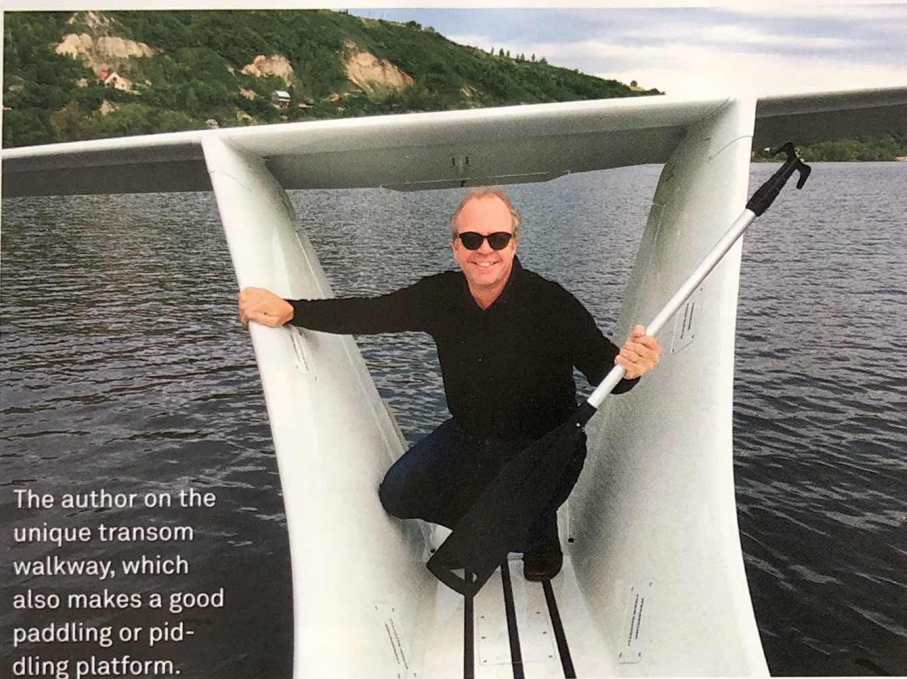


L44 cockpit (above) is a modern, spacious environment, as is the passenger cabin (below). The seats fold forward for easy cockpit entry and egress, and for carrying bulky cargo.

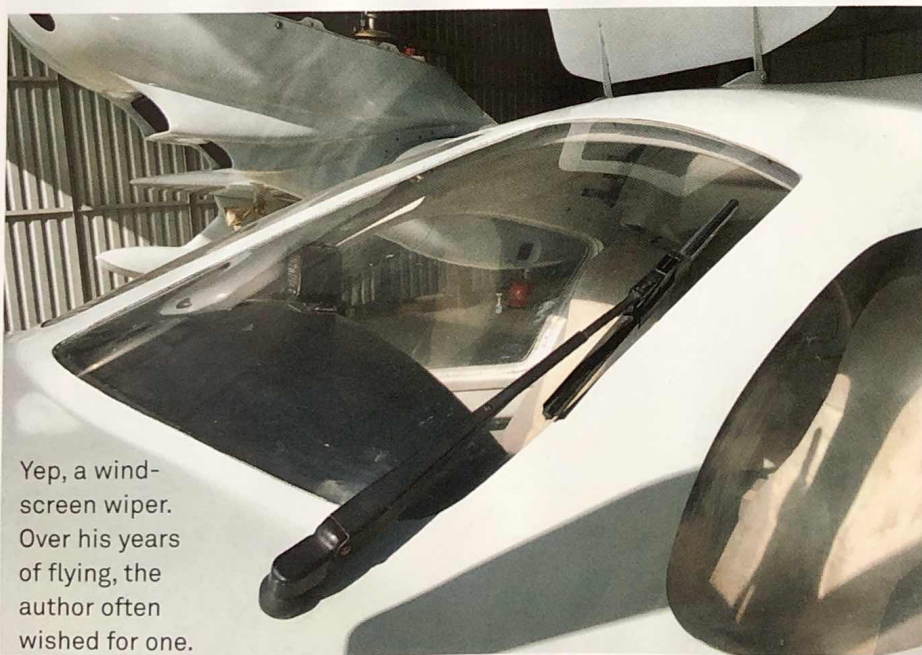




Having landed on pristine Lake Baikal, disembarking is an easy walk on the fuselage "boardwalk."



The author on the unique transom walkway, which also makes a good paddling or piddling platform.

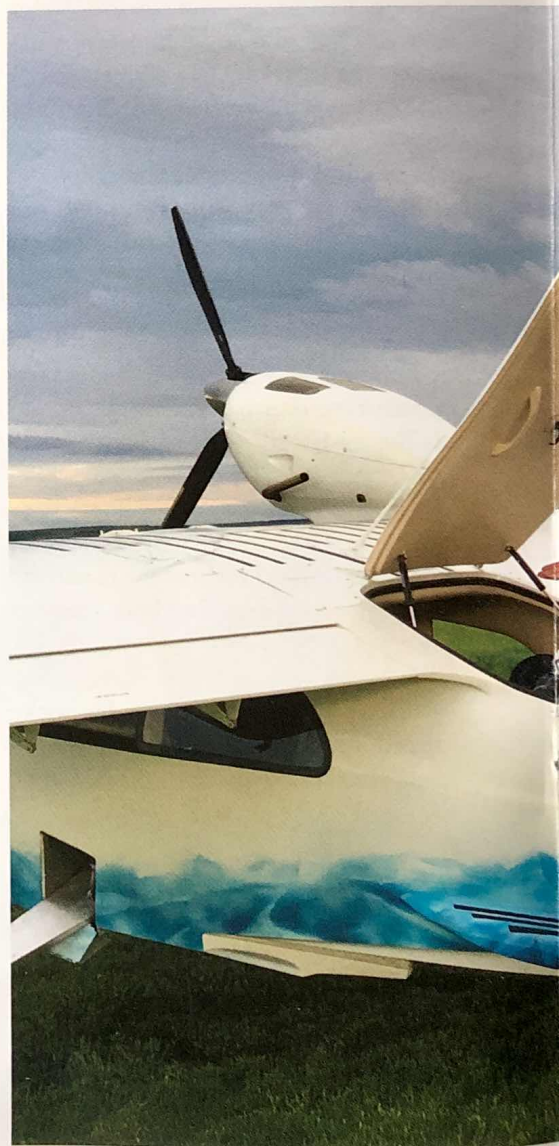


Yep, a wind-screen wiper. Over his years of flying, the author often wished for one.

very strong aeronautical division, and that many graduates work for the Chaika Design Bureau, the source of all of these flying boats. No where else in the world is a whole town so dedicated to such an obtuse and frankly old-fashioned form of flying. I was feeling like I'd arrived in Shangri La rather than the middle of Russia.

I was given guided tours of the various factories and found composite construction quality I'd usually associate with building high-tech racing yachts. The quality of finishes is very high, and the structures rock-solid with a mixture of glass and carbon layups. The cockpits are all very generous in terms of space because, I was told, "Russian men like bears—they are big and strong and need room to move!"

The next day we test-flew the L44 from SeaBear Aircraft. What I discovered was a magnificent aircraft that flies beautifully and is incredibly well built.





The aeroplane building in Samara is of the highest quality and ingenuity, and also practicality.



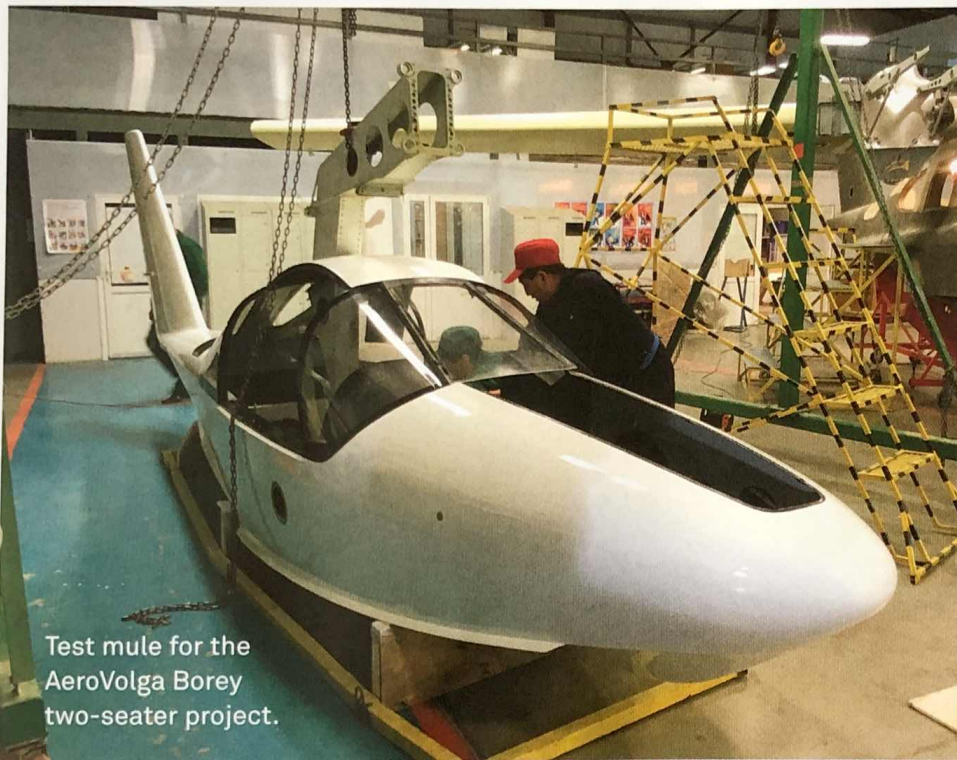
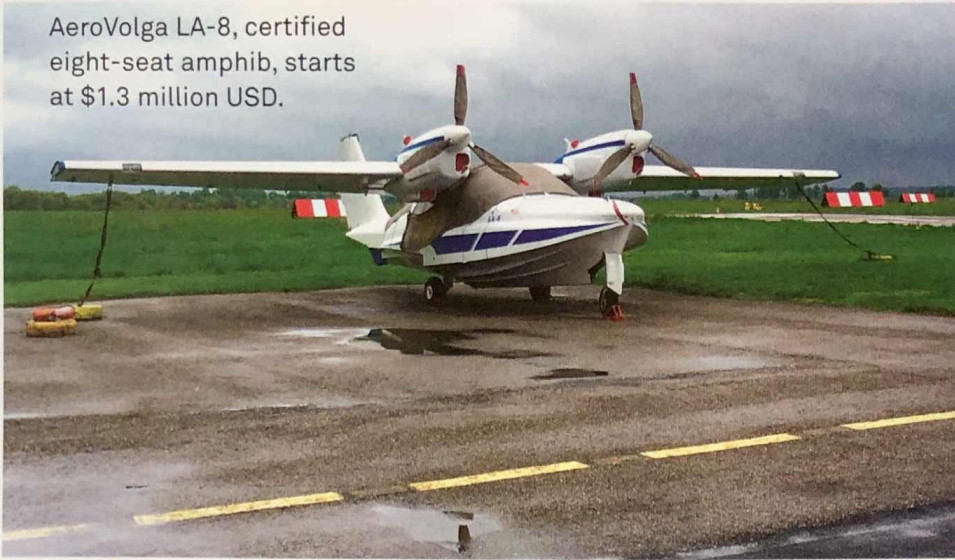
L44 hull under construction. A healthy application of carbon is used in key areas.



Unique door entry into cabin, and an impressive paint job for the demonstrator SeaBear.



AeroVolga LA-8, certified eight-seat amphib, starts at \$1.3 million USD.



Test mule for the AeroVolga Borey two-seater project.



Seriously rigid floor structure—just what you want in an amphib.

It ticked six of the seven attributes I was seeking, using Rotax 914s rather than the diesels I had hoped for. But I accept the reality that small diesel engines have a way to go. Having flown 480 hours around the world beneath one of those Rotax engines, I was very comfortable with the whole package.

At the airport I also discovered AeroVolga, whose eight-seat twin-engine LA-8 has been available for some time. They also have a nice little two-seater coming, the Borey. It was amusing to see years of prototypes of various flying watercraft littered around in the back blocks, with new shining examples lining the runway edge.

In isolation they have developed a unique and robust solution to the problems faced by Australian seaplane pilots, which is that most currently available craft were designed and built by Americans and Canadians operating from fresh water. The aeroplane building in Samara is of the highest quality and ingenuity, and also practicality. An example is the top hatch for cabin entry and the tail cone gang plank feature for boarding in your good shoes!

We spent four days test-flying these seaplanes on the Volga and across into Siberia to land on Lake Baikal, which is so ginormous it holds 20 percent of our planet's fresh water supply! All the while I was discovering gorgeous countryside and waterways, and big-hearted people.

One of the great discoveries of my solo global circumnavigation was the generosity of strangers, and my new Russia friends did not disappoint. In Siberia the owner of an L42, an earlier model of the 30 SeaBear aircraft now being built, asked his young neighbour to come along and help with translating. Turns out Victor not only spoke perfect English, but had just returned from 10 years in Melbourne, having just finished his PhD studying a medicinal use of jellyfish venom at Monash while also twice being named a world champion in Karate. Quite an amazing and very focused young man.

After we landed on Lake Baikal, with the water a near icy 3 degrees C, he jumped off the aft deck of the SeaBear for a swim, then climbed back on board via the transom. Is there another seaplane you'd so easily do that from?



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The flying we did around Irkutsk, self-proclaimed as the Paris of Siberia, was not only interesting for its stunning scenery and city, but intriguing for the heavy-metal aircraft. Some were still actively flying while others were being raided for parts or simply sat dormant at the Oek airport we operated from. There was a very active scene with dozens of aircraft including MIGs, Yaks, and Antonovs, and a dozen or so engineers running around working on them. The sight of the Antonov AN-2 firing up for a day's work is an impressive if smokey affair!

Everyone I met was very proud of their aeronautical industry and countryside. They live through awful winters of snow, ice, and subzero temperatures, so in return make the most of their summers. Many have cabins or campsites they relocate their whole families to for three months over summer, which seems to have contributed to a desire for interesting watercraft. That, and so many aeronautical engineer graduates that work in design bureaus perfecting unusual ideas.

The built-in gangplank, walking through twin rudders which gave great authority.

If I'd listened to the naysayers, I never would have ventured into the middle of Russia and therefore would have missed out on what may turn out to be a life-changing opportunity. It highlights the importance of mental framing and what I like to call Organised Spontaneity—careful planning accompanied by flexibility to react to the situation at hand. Crucially, the way we approach a problem has a dramatic effect on the end result. Without knowing exactly how this would turn out, I went in with an open mind and was rewarded with great discoveries.

So for now it's more flying in the Searey, but this new adventure is to be continued—stay tuned!

*Michael Smith is a British/Australian documentary filmmaker and operator of the popular Sun Theatre/Cinemas in Australia. In 2015 he completed an around-the-world flight in his Searey, which he called Southern Sun. The trip took 210 days and 480 hours of flying, covered 25 countries, and included 80 stops. He also visited 70 cinemas during the trip. The Voyage of the Southern Sun book and DVD are available from the website [www.southern-sun.voyage](http://www.southern-sun.voyage) or on Amazon.*

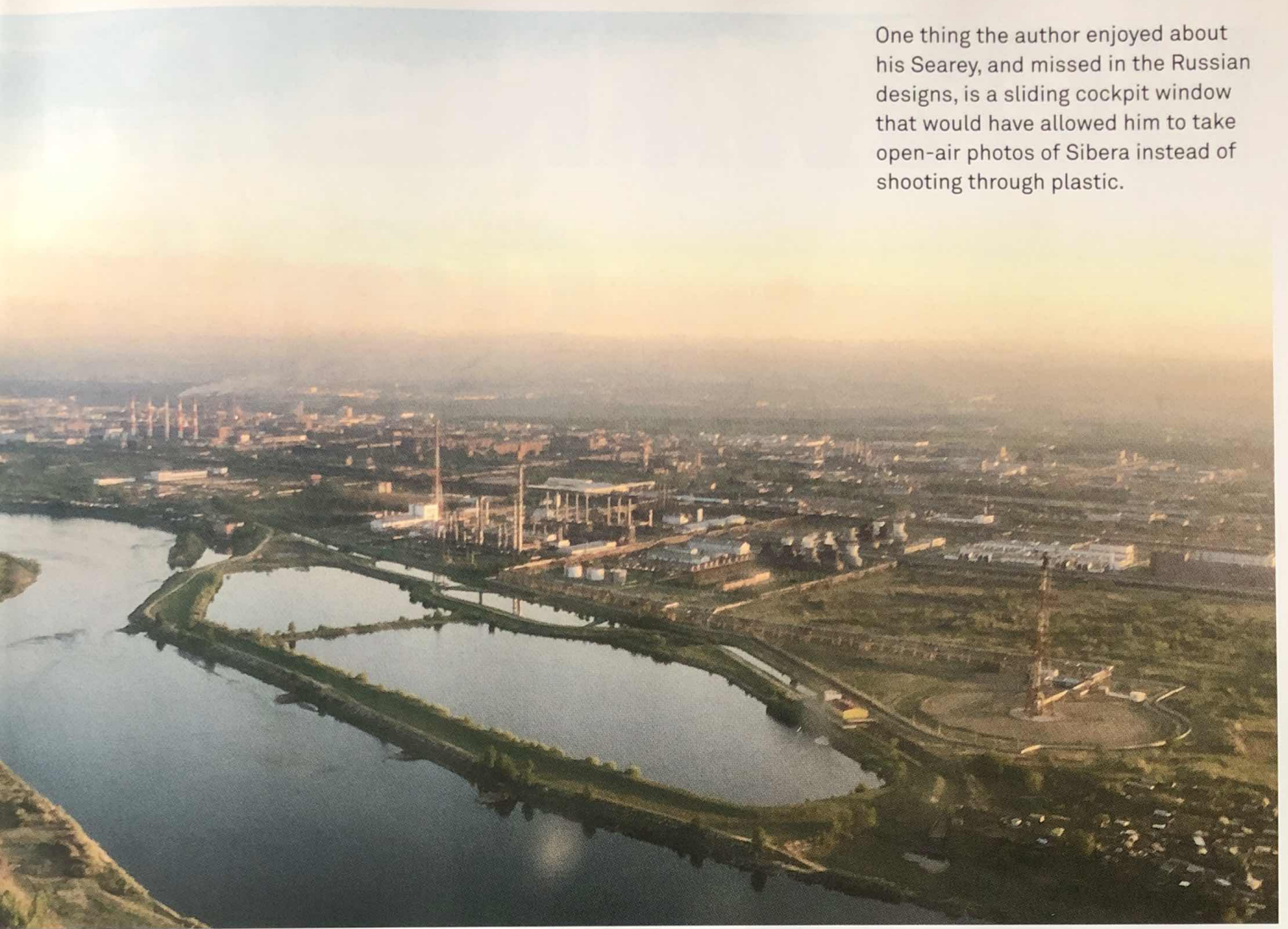


The Oek Airport near Irkutsk had a large variety of flying and dormant military hardware, including (clockwise from top left) a herd of Yaks, replica of rocket built in Samara that blasted Yuri Gagarin into orbit, workhorse Antonov AN-2s, and helicopters that have seen their last hover.





One thing the author enjoyed about his Searey, and missed in the Russian designs, is a sliding cockpit window that would have allowed him to take open-air photos of Siberia instead of shooting through plastic.



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