

Traveling the World in a Vision Jet: Central Asia – The STANS

by Amir and Tamra Hyster

The Route

Bucharest, Romania • Tbilisi, Georgia • Baku, Azerbaijan • Ashgabat, Turkmenistan • Dushanbe, Tajikistan • Bishkek, Kyrgyzstan • Almaty, Kazakhstan • Tashkent, Samarkand, Bukhara, Urgench/Khiva, Uzbekistan • Yerevan, Armenia



AMIR AND TAMRA HYSTER are active aviation travelers, flying themselves throughout the world and writing about their experiences. The Vision Jet is their fifth Cirrus aircraft (they recently upgraded to their second Vision Jet), a progressive move from their previous SR22N, SR22TN and SR22T that they previously flew on their world adventures. Visit their website for more stories and information: www.VisionJetTravel.com



Airport operations at Bucharest, Romania.

JUNE 2025 COPA Pilot

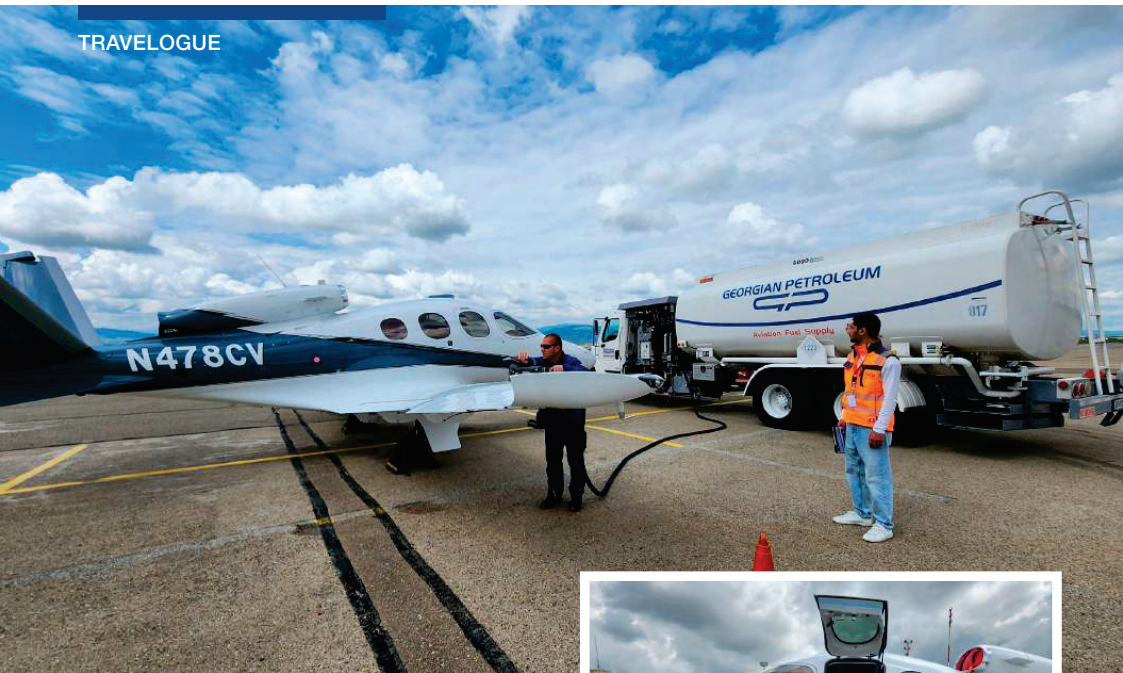
Preparation for the Flights

We started our STANS trip after attending the European COPA Migration, held in Karlovy Vary, Czech Republic, meeting the European members and presenting our stories of traveling around the world in our Vision Jet.

The “iStan” group of Central Asian countries stretches across Eurasia and was an important part of the Silk Road. The suffix “istan” means home or land in classical Persian language. The Persian and Turkic cultures were the leading influencers of this region. The Tajik people followed and developed their own languages before the Soviet rule in the 19th and 20th centuries. These countries are now independent and keep close diplomatic relations with all countries in the East and the West – working with all nations is a constant struggle to maintain relations and carve out their own self-development.

Whilst they are strong in their Indigenous culture, they are also one of the richest areas on earth with trillions of dollars of natural resources and commodities that place them on the world stage as important energy suppliers. Kazakhstan is the biggest supplier of uranium to the world.

General aviation (GA) in Eurasia is small and they had never seen a Vision Jet in any of the places we visited. It’s an extremely hard place for GA, with no infrastructure



⤴ Fueling up at Tbilisi, Georgia.

for handling, no FBOs and almost no one speaks English. It is the harshest and most dangerous place to fly due to its topography. For several months before our journey, Amir negotiated with handlers and flight support companies in numerous CIS (Commonwealth of Independent States) countries. We found a flight support operator in Georgia to assist us in some countries, but most of the handlers we used were Amir's connections and friends at World Fuel Services. They were mainly airport staff who did handling for the airlines and were very excited about doing it for us as a side job. They knew the system inside out and were excellent.

Jet fuel was not an issue as World Fuel Services in Singapore was at our disposal and provided us with excellent support throughout the trip. Jet A is reasonably priced and in some countries very cheap. Avgas is not available due to the geography of the area and the lack of piston airplanes in the region.

A month before the trip, ForeFlight noticed that we were trying without success to load flight plans of Central Asia. They contacted us and asked us if we were willing to be their test case and provided us with special access to their software for this area. It worked well and if we encountered an issue, ForeFlight fixed it quickly.

Our flights also attracted the attention of OPS GROUP, which organized the largest conference and workshop addressing



⤴ Pizza delivery before departure from Tbilisi.

the issues stemming from global GPS jamming and spoofing. Amir was part of this high-profile group, representing small jets.

Each flight needed to be planned with exact time, dates and navigation point of entry and point of departure or exit. All entry permits, overflight permits, parking slots and spots needed to be cleared in advance including travel visas.

In some countries we relied on using the 72-hour technical stop visa for aircrew. We planned on spending no more than a few days in each country – except for Uzbekistan – and once we were in Eurasia, many of the flights would be shorter than two hours, following along the Silk Road.

Getting to the Region

We fueled up in Bucharest, Romania, and headed directly to the Black Sea. North of Bulgaria we crossed the shoreline and the GPS flashed on and off, we received a CAS message that GPS was lost. Just like a time warp movie, we were plunged back in time when the only navigation method left to us was Dead Reckoning (DR) the same way we navigated before the invention of the GPS.

Amir was prepared for a GPS jamming, or worse a GPS spoofing occurrence. He had already taken down the heading, expected times and distances to each of the next navigation points and calculated speed and wind factors to get an estimated time of arrival to each NAV point.

By the time we were near the coast of Turkey, the GPS was dangerously misleading and showing us tracking diagonally, over Turkey and then flying in Egypt, it was hundreds of miles away from our actual position. We were still above the Black Sea in clear conditions with a visual on the coastline of Turkey.

Who was jamming and spoofing GPS systems around the world, and why? A good question; in that part of the world it could be the U.S., U.K., Russia, Ukraine, Turkey, Israel and Egypt, to name a few. It is not clear who the offenders were; it is very dangerous for all types of aviation. If we were not ready and expecting it, we would most likely have tried to correct our track by turning left, very left, which would put us into the Crimean airspace. A single-engine jet in this region would provide a radar signature that could be interpreted as equivalent to an unidentified cruise missile. We could add all the drama scenarios we want but this would be a very bad situation to be in. We continued and maintained DR and back to basics like the old days before flying computers.

We were above the Black Sea and all around us was just water. Our ground speed showed 764 knots, a tailwind of 329 knots and 744 knot crosswind! We also lost our EGPWS (Enhanced Ground Proximity Warning System), weather radar, Garmin Connect, ADS-B, traffic and more. Every point of reference on the avionics was incorrect. We kept the most basic aviation rule: Aviate, Navigate, Communicate.

From time to time, the Turkish ATC confirmed our position as on course and we just maintained headings whilst calculating distance by measuring time and speed. We were handed over to Tbilisi ATC and the view of the snow-covered Caucasus Mountains was right in front of us. We were pleased that upon our arrival into Georgia, after over 600NM we were less than 2NM left of track. The GPS over Georgia did not return, requiring vectors by ATC to the ILS runway 31L for a smooth arrival.

Having visited Georgia before, we only stayed overnight, taking off the next day to commence the prearranged schedule.

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Example of the GPS spoofing that occurred over the Black Sea. Thankfully Amir was prepared and had already calculated expected times and distances (with the wind and speed factored in) to the navigation points.

Tbilisi, Georgia (UGTB) to Baku, Azerbaijan (UBBB)

The departure from Georgia took us west toward the Caucasus Mountains, which were covered with large thunderstorms. We avoided them by using our new Garmin Automated Weather Radar System, turning slowly to the east, dodging the weather and heading toward Baku. Our flight covered a vast landscape of the Caucasus Mountains, with Lowest Safe Altitude (LSA) of 17,100 feet, higher than the Colorado Rockies and the Montana Granite Peaks.

The approach to UBBB, RWY 34, took us over the Neft Daslari settlement, known as Oil Rocks, in the middle of the Caspian Sea that is dotted with hundreds of offshore oil platforms. They are linked up with hundreds of miles of oil pipes and a small city of 2,000 dwellings built on landfill or floating platforms 60 miles from the mainland in the middle of the sea. The first offshore platform was built in Azerbaijan, a country that was the largest oil producer in the world at the beginning of the 20th century. During the approach briefing we noticed that the DA was 182 feet, and that we would be 200 feet above the ground. How can that be?

The Caspian Sea, the world's largest inland body of water, is 90 feet below sea level making Baku the lowest-lying capital in the world and the runway is also 20-50 feet below sea level.



The old city of Baku, Azerbaijan, in the foreground and the modern city highlighted by the flame towers in the background.



⤴ **A fountain** on the Caspian Sea in Baku, Azerbaijan.

The country with a population of 10 million sits between Iran, Armenia, Georgia and Russia. On the world stage, they hold their own as a major supplier of the world's most prized black gold, gas, petroleum and other treasures like metals, marble and limestone.

The Caspian Sea provides another major export for Azerbaijan – the Sturgeon fish – caught both for its delicate meat and fine caviar, a massive fish growing up to 3 feet and weighing up to 500 pounds!

The city is a mix of modern skyscrapers that come alive at night in a light show on

the three Flame Towers. We visited the Heydar Aliyev Cultural Center in the old city of Icheri Sheher. Full of character, narrow roads and historical 12th century stone buildings, towers and religious domes, including the Shirvanshahs Palace, built as a mausoleum burial vault with a bathhouse. The restaurants have interesting food overlooking the palace, while in the background is the modern city light show. ☺

Stay tuned for Part II – we fly to Turkmenistan and Tajikistan.



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