

A view of part of the Kaibab Forest on the north rim after crossing over the visitor center. Photo by Troy Bradley. Top overview Photo by Christopher Banks

BY TROY BRADLEY

he Grand Canyon is one of the most revered natural masterpieces on earth. It is a UNESCO World Heritage Site, a National Park, and one of the most famous geological wonders of the world. This magnificent, awe-inspiring spectacle draws nearly 6 million visitors every year. Most of these visitors view the canyon from the National Park Service overlooks. Many will take aerial tours by airplane or helicopter. The more adventurous may hike or raft in the canyon. However, very few have ever seen this bewitching maze of rocks from the gondola of a balloon! The idea of flying over this iconic canyon was something that had played in the back of my mind for years.

That idea that had long receded somewhere deep in my brain was suddenly transformed into a high priority, on the afternoon of January 22nd, when I received a text from my wife, Tami. She let me know that Jon Radowski had posted on Facebook, "Ultra-last-minute GRAND CANYON FLIGHT ALERT! Weather looks ideal for another Grand Canyon flight tomor-



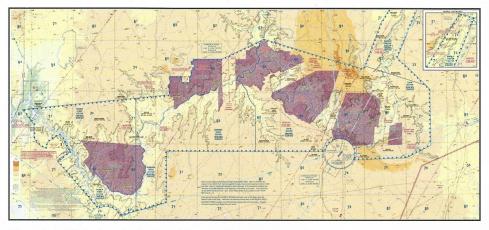
row!" Checking the sunrise time at the takeoff point (Kanab, Utah) I saw that we were on a tight timeline to pull this together. We were only 19 hours before the sun would be breaking the eastern horizon in southern Utah. The time constraint was the first obstacle in making this dream flight a reality. This is the point that stops so many people in pursuing dreams! When the opportunity arises, too many people look at the why it can't be done; rather than what needs to be done. I have to admire the support my wife always gives, when her first response is "why not?" to any adventurous undertaking. Filling life with memories, rather than regrets, has always been important to us; this opportunity was sure to create some indelible ones.

Fortunately, the balloon was fueled, in annual, and loaded in the trailer. Since it was a weekday, on short notice, there was some scrambling for finding crew. As I was planning on flying solo, I only needed a driver for the chase. Always up for an adventure, my friend Anastasia Peralta agreed to go with me to drive my truck. I'm very thankful for her assistance, without her it would



Just how big is the Grand Canyon? See the balloons for a little perspective! Photo by Troy Bradley.

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The sectional flight chart for the Grand Canyon. Photo by Troy Bradley.

have been a long Uber ride back to my truck after flying.

While I was in the process of putting my gear together, four other pilots were doing the same: Jon Radowski, Shawn Wix, Shane Cory, and Dean Donely. Jon, Shawn, and Shane were all driving up from Phoenix, while Dean and I were driving over from Albuquerque. On each weather forecast update, all the models indicated that the pattern was stable and conditions suitable for a north to south crossing of the canyon. Happy with the forecast, Anastasia and I headed out of Albuquerque that evening.

Driving through the night, in very desolate areas, gave me a lot of time to contemplate the upcoming flight. Weather, fuel consumption, bailout options, and communications were all on my mind. The other item that needed to be addressed was the airspace in which we would be flying. The Grand Canyon is encased in a Special Flight Rules Area (SFRA) and even has its own aeronautical chart for operations. At first glance, the chart is daunting! It appears that a balloon flight would be impossible unless you could maintain a track, at a mandatory altitude, in any of the flight corridors. There are many reasons for the complexity of this airspace in and around the Grand Canyon.

The immensity of the canyon is difficult to comprehend from a ground-based perspective. The advent of powered flight was a game changer for canyon tourism, as entrepreneurial pilots began offering visitors a new way to cover more area and experience the unparalleled scenery from a birds-eye view. In 1927, Scenic Airways was founded

to give aerial tours of the area. They changed their name to Grand Canyon Airlines in 1930 and are perhaps the world's oldest air tour company in continuous operation. For a long time, there were no rules or regulations for operating in and around the canyon. Then in 1956, there was a watershed accident when two airliners collided at 21,000 feet MSL while over the canyon. At that time, they were operating in uncontrolled airspace. It was the first time over 100 deaths occurred in an aviation accident. It was the catalyst for many aviation reforms and a driving factor behind the formation of the Federal Aviation Administration.

Thirty years later, in 1986, there was a collision between two sightseeing aircraft (a Twin Otter and a Bell helicopter) flying below the canyon rim killing all 25 occupants. At that time, all routes and altitudes were conducted

by a "gentleman's agreement" with the various tour operators. There were no set regulations or standardized routes for the air tour operations. This is no longer the case, and the airspace has been designed to safely accommodate both tour operators and general aviation. These designated flight corridors also prevent pilots from flying in areas that are meant to protect the natural sounds and ambiance of the canyon for ground-based visitors. These no-fly areas extend from the surface to 14,500 feet MSL.

The solution for a balloon flight across the canyon is to stay above 14,500 MSL and below 18,000 MSL. Of course, to maintain those altitudes supplemental oxygen is required. With oxygen and maintaining proper altitudes, you can legally cross the canyon without needing a waiver or letter of authorization. Understanding the airspace and how to operate in it is crucial for a safe and successful flight.

As Anastasia and I continued driving through the night, every flag or smokestack I spotted seemed to indicate very light surface winds. It was all continuing to look good weather-wise. We arrived in Kanab in the middle of the night, and checked into the hotel. The next morning, after a very short night's sleep, all of the teams met for breakfast to discuss the weather and flight planning. The weather and the trajectories still looked ideal. We finished breakfast, checked out of the hotel, loaded in our vehicles, and caravanned out to the local airport to get set up.



Shortly after launch from Kanab, Utah. This view is from Jon Radowski's balloon as the other pilots are climbing to altitude. Photo by Christopher Banks.



Above: 20 or 30 minutes into the flight. "Everyone was up to altitude and we were moving 40+ mph at the time. It was around this time that realized how awesome what we were doing was." - Photographer Christopher Banks.

Below: A panoramic view created by photographer Christopher Banks and comprised of multiple shots stitched together and taken just after crossing the Colorado river.



Jon had previously launched from the airport on trans-canyon flights and had good relations with the Airport Manager. We were allowed to use a taxi way for the inflation and launch. All of the balloon crews were relatively small. In order for us to launch as a group, the crew members worked together assisting each other with the set up and inflation of each of the balloons. Approximately one hour after sunrise, we all launched and went almost straight up over the airfield. The winds were

extremely light at the lower elevations and kept us in tight proximity to one another for some time. Considering we needed some speed to achieve our goal, I'm sure several of the pilots and crews wondered if, and when, we would hit those forecasted winds aloft. The airport elevation is 4,900 feet MSL, and it wasn't until nearly 8,000 feet MSL we started to pick up any reasonable horizontal movement. From that point upward, just as the models predicted, the speeds continually increased with al-

titude. We all settled into a comfortable altitude between 14,500 and 16,000 feet, travelling SSE at 40-45 mph.

Now comfortable with the speed and direction, we had time to begin to enjoy the stunning scenery around us. We had a common radio frequency and were able to communicate throughout the flight. By listening to the radio exchanges, it was clear that the mutual experience from separate baskets had everyone in awe. The benefits of jumping on this opportunity were readily appar-

ent as we were all visually rewarded by traversing this rugged landscape with an unimpeded view. In-flight calculations of fuel consumption, speed, and desired landing target area confidently agreed with the preflight projections. That allowed time to fully enjoy the experience and to appreciate the fact I was in a basket high above this magical, diverse national treasure.

I wasn't terribly well-versed on the geography of the entire flight area before embarking on this adventure. I didn't even know where Kanab was two days before this flight, let alone that it is in Utah, not Arizona. It turns out that this was an excellent starting point based on our wind speeds and direction. Kanab sits on the Utah/Arizona state line and is about 35 nm north of the beginning of the Special Flight Rules Area (SFRA). After launch, we had several miles of potential landing places, in the event that we encountered any problems or unacceptably low speeds. Continuing south, the open spaces and accessible roads quickly diminished as we entered the Kaibab National Forest. It is a beautiful forest that is on both the north and south rims of the canyon, which covers about 1.6 million acres in total. However, it is heavily wooded with very few forest service roads. It is not at all inviting for landing, so we were truly committed at that point to going all the way.

The green of the forest with the white of the snow created a dramatic contrast to the red hues of the canyon where the forest abruptly falls into the canyon. The canyon, which averages about one mile in depth, drastically changes your visual cues to its size as you leave the edge. The canyon was formed by the Colorado River cutting through layer upon layer of rock over millions of years. As the earth recedes further below your feet you can see, with great clarity, the different layers of time carved through the rocks. Moving sediment as it flows; the river slowly abrades and erodes the canyon floor. This natural sandpaper below the river's surface is continually altering the depth, shape, and destiny of the gorge. Yet, when we crossed so high above the river, it was hard to imagine this seemingly tranquil ribbon of water's amazing force. As we approached the south rim, we were headed directly towards the Visitor's Center. I'm sure it was a mysterious, albeit welcome, sight for the visitors and staff to see this unexpected parade of balloons.

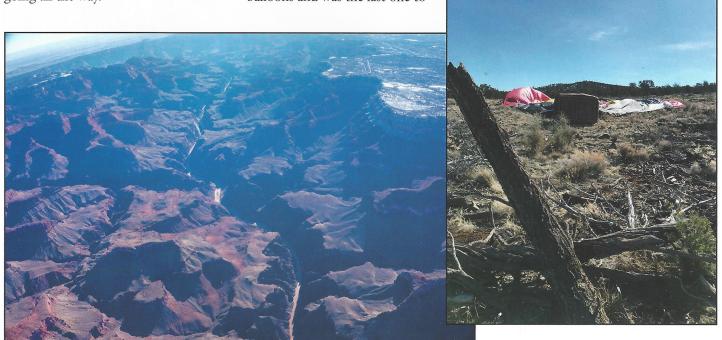
Having cleared the south rim, we began to set our sights on flying beyond the National Forest to clearings for landing. The winds remained relatively gentle on the surface for most of the landings. I was positioned a little further east than the other balloons and was the last one to

land. My landing speed picked up right at the end to about 10 mph. I ended in a field that was a bit rugged with rocks and the remains of cut trees, right along Highway 180 halfway between Flagstaff and Williams. Anastasia arrived over an hour later, and with the help of several other crews we carried the equipment out a few hundred feet to the road.

After 3 hours of flight time and 103 miles traveled, I was smiling ear to ear having successfully completed the flight. It seemed surreal that we had just completed such a magnificent flight that from inception to landing was a mere 24 hours in the making. To view the immensity and grandeur of the canyon from our vantage point was truly one of the most incredible sights that I've seen from the air. Like the water that etched this amazing gorge into the earth's surface, the memories of this flight are etched deep into my mind.



Safe landing and end of a "grand adventure!" Photo by Troy Bradley.



The mighty Colorado River that cuts through the canyon seen from altitude appears as little more than a stream. Photo by Christopher Banks.