

Gas Ballooning in Texas

by Philip Bryant

Where does one begin when writing about a rather uneventful balloon flight? There was nothing unusual about the inflation, launch, and landing, but the experience was about much more than just the flight. Many Houston balloonists were anxiously waiting the first launch of a gas balloon in Houston since 1927. After a long delay since this balloon arrived in Houston, we finally put the balloon up despite the 97 deg F temperatures and 90% humidity. We selected a day where the winds were light and forecast to be light for the following day. There was no convective activity forecast in the area that we planned to fly. So it seemed to be time to launch as we were running out of days to get a flight off before going on to the Americas Challenge. The flight as indicated earlier was uneventful; I will expand on the lack of excitement later in this article. If you want to talk about excitement, recall last year at the Americas Challenge we had to deflate the balloon due to persistent high winds that caused the gas launch to be cancelled. As I often do, I digress.

For some time I have wanted to participate in gas ballooning so three and one half years ago I traveled to Germany to receive training from Willie Eimers, the master. I had a wonderful time learning the subtleties of gas ballooning in a country as beautiful as Germany. I was fortunate to fly gas flights with Phillip MacNutt in the Americas Challenge for two successive years. We did OK and had some really great experiences. Last year, my friend and copilot Bert Mann and I went to Germany for additional training with Willie and to get the limitation removed from Bert's certificate. The story of that trip has been covered in another article. While in Germany, we visited the Wörner factory where a balloon we had purchased earlier was being inspected and registered in the US. We brought a slightly used Wörner STU-1000 to bring back with us to fly in the US, as we could not see any reason why the Germans were having all the fun, flying hydrogen balloons exclusively and doing it all the time. There did not seem to be anything in the mix that we could not do, I reasoned. While I was there, I received the training to perform annual inspections on gas balloons from Wörner so we may maintain the balloon in my shop. The much anticipated balloon finally arrived, all of the paperwork was complete and we entered in the 2009 Americas Challenge just in time. We showed up all excited to fly in the AC, but that was not to be. We came back to Houston waiting for some good weather and as life would have it fall turned into winter, it rained, the wind was blowing mostly in the wrong direction and it continued until early summer. To avoid a boring story and litany of excuses, the balloon sat ready to go until the annual inspection ran out, so we had to perform that as well before this first flight. Having done all the right things, we finally said, it may be hot, but it is time to go. Now or never.

We rang the bell, sent out announcements to an extended list of friends and balloonists who indicated an interest in the launch. The hydrogen was ordered, the many items made ready and at the appointed time, pilots, passengers and many balloon enthusiasts showed up to help, watch and witness the first gas balloon launch in Houston Texas since before any of the attendees were born, including me, if you can believe it. In some small way we felt we were making a bit of history. I am sure that gas ballooning had languished for longer times in other parts of the world, but this is our part of the world and we are balloonists, if that makes any sense.

There are many details to take care of when launching a gas balloon. Unless you know or have been exposed to it, the details will escape your notice. Not many are absolutely critical, but all of the details can make a difference under some circumstances. A few of these situations in ensuring the comfort of the pilots include avoiding excessive sun, dehydration, hunger and making accommodations for personal needs (the most common asked question, I believe in all of gas ballooning is “how do you go potty?”) You must also be able to communicate to the ATC system as well as to your chase crew. With the new technologies, we have GPS trackers, loggers, flight instruments, and on and on. You should have redundant systems in case one of them fail, so some stuff in never used, but it is there just in case. You can load yourself down with just in case stuff such that winning a serious competition becomes impossible, so it pays to have light, reliable, efficient and only necessary stuff on board. It pays to plan. You should plan the mission so you do not land with 30 pounds of stuff you never used. Weight is the name of the game. Every pound you lose from your diet, every pound of stuff you leave on the ground, means a pound of ballast and that is good as gold.

The basic stuff is just enough food, water, and necessary personal items for the trip planned. We were planning just an overnight flight, so not much in the way of water, food and other items were required. The temperature at cruise altitude was in the 70's, so no jackets and heavy clothes were required, that helped. The basket we flew is designed for a maximum of four passengers, but that means that the four must remain standing for the full flight. There were three on this trip, so we did not install the bed, but brought buckets to sit on, thinking that we would be just fine. Did I mention that gas ballooning is also a sport that you learn a new lesson from each and every flight? Wow! Did we ever learn a lesson that night? Three fairly big boys sitting in a small basket on buckets all night long is not the way to be comfortable. Anyway, we piled in all the stuff we thought we needed and left some stuff on the ground we thought we needed, but at the end of the flight, it was exactly what I hoped it would be, a learning experience. I promise to remain a student pilot all my remaining flying years. If you think you have it all nailed down, you are in a heap of hurt. Getting ready for the AC will be fresh in my mind, I have some clear ideas about what I intend to do and not do hoping I will come closer to being in the lead.



The assembly of the balloon is not too difficult, but you must be careful to do it right the first time and without any rush. We got a bit ahead of ourselves and had to make some minor adjustments that made us look like the keystone cops, but in the end it all worked out. One item that we have to assist in getting the balloon inflated is an inflation harness made by Wörner Balloons. When we first saw this contraption, we were a bit puzzled by it, but using it correctly really does make a difference in safety and convenience. It is impossible to describe so I will not try. If you are really interested, try to show up and take a look at one during any gas inflation where they use one.

The hydrogen gas delivery truck from Air Liquide showed up two hours late, which really put a cramp in our launch schedule. We had planned to do a couple of landing approaches before it got dark, but the late launch precluded that. We have discussed this with the gas supplier and they want to do better next time so we hope to have a better training experience next time. We had a slight problem with the gas fitting from the delivery truck; it was not as the gas salesman stated it would be. The manager of the National Warehouse for Air Liquide had the foresight to



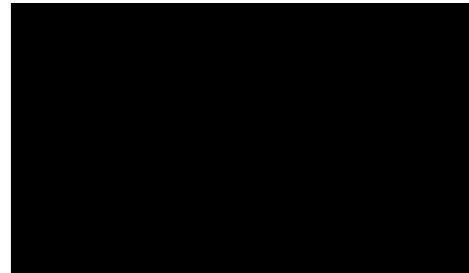
give me both sides of the connection so when the truck arrived we were able to adapt the fittings to work. Now we know for sure. Experience counts. We had sufficient gas hose to make the connection and soon the flow of hydrogen was coming off the truck. The balloon began to billow and move in slow response to the very gentle breeze. At the time that seemed right, we released the inflation harness and the envelope sprang upwards as though it was suddenly free from gravity. The top parachute found its seat and subsequent hydrogen delivered to the balloon increased the pull on the load ring. We learned some things about how fast to fill and what not to do in rigging the balloon for flight. Nothing major, just some ah ha moments for us. As the gas load continues to fill the balloon to its maximum capacity, the lift it generates is considerable. This lift must be balanced by the addition of ballast in the form of sand, water, equipment or passengers. The process must be carefully monitored by a crew chief that has experience and knows what to watch for. We were very fortunate to have that person, Brian Critelli, an experienced gas pilot who lives in the greater Houston area. Brian's watchful eye produced a flawless inflation and launch.



Came time for the launch, loved ones came to the basket to whisper sweet nothings to each other promising to see each other at the landing site, where ever that would be. It is always an emotional moment, at least for the more inexperienced. I never saw a tear in Willie's eye, but I was not there in the beginning for him, so I really do not know. Just as soon as the balloon lifted off, the crowd started chanting "Put out the lights", which we all know is really not what they meant to say. Since the loading of the basket was done rather rapidly, the running night lights were not exactly handy but buried in some other gear. It took a moment to deploy the lights. The chants of the crowd were easy to hear way past the point I wished we were clear of unsolicited advice. Nevertheless the lights were deployed in good order and you could almost hear the collective sigh of the spectators.

The flight began in near darkness. We cleared tree tops on the way out, paralleling some power lines, but never close enough to cause any concern. As we climbed out toward the north, we were under the 4000 foot ceiling of class B airspace just on the outer ring. We called Houston Approach and obtained a clearance to climb into the class B airspace so we could continue on a more westerly direction away from Houston Intercontinental. The controllers were a bit amused at our breakneck speed of 6.2 mph. The controller handling our aircraft reported our position to another aircraft and referred to us as a blimp. Not letting such a gaff go unchallenged, I set the controller straight on what type of aircraft we were. We had a nice chat later on that evening since to them we were just hanging around on the scope probably much like a bug on the windshield, apparently not going anywhere at least compared to other similar blimps. You could tell by the conversation with the controller, he had never handled a gas balloon. He asked many questions which with belied his understanding of balloons. All balloon pilots hear similar questions when you know the questioner is not totally familiar with how it all works. Somehow we felt we have a skill they do not, so there. It was amusing and at the same time we share the larger picture with other aircraft in a way that hot air balloons do not. If you are going to play in this environment, you need to obtain skills similar to an instrument rated pilot at least in terms of navigation and communication.

As the night wore on, we started to move away from the Houston TCA and we were then handed over to Houston Center. The controller we were passed to also engaged in a conversation about what kind of aircraft we were and what we were doing. Never a dull moment, but it does provide some entertainment. The night was slow. The balloon would slowly rotate such that if you stopped looking for a while it was difficult to know where you were as the city lights you though were behind you were suddenly in front of you. You had to learn that it was not the direction of the lights from you that determined your position, but regardless of how you were facing, you were in a unique location, which you may have to reestablish in your own mind due to the fact you lost track of where you thought you were. You may have to go slow over the previous statement. Oh, well, you tire of being confused so you just watch the track on the navigation screen. We were hoping to be over College Station earlier in the evening so perhaps some of the balloonists from that area could actually see us flying over. Dan McGuire, a rather creative type, sent me this picture of the balloon flying over College Station at approximately 4:00AM. That is exactly what it must have looked like.



As the sun began to come up, we started to stir and plan for the morning of practice approaches. We allowed the balloon to very slowly descend to a few hundred feet off the ground so we could start the approach process. Dale Tibodeau took the first shift, did a few approaches. You could see that he was starting to understand the effect of a little venting and how to correct that with some small amount of ballast. We flew over the little town of Bedias, Texas at about 300 feet, where we saw our chase crew standing by the side of the road waving to us. It was great to see that. Bert Mann then took turns making some approaches and then it became time to find a place to land. With respect to the elder, I guess, I then made an approach or two; I do not remember exactly how many as I was so focused on

finding an opening. We were in the thick of some South East Texas trees. Finally, we found a place to land. It was tight but we put it down safely.

Almost as soon as we landed the land owners appeared in their 4 wheeler. They were absolutely gracious and hospitable. We got to know a little bit about them. They told us that last December they had lost their son in an automobile accident and during the funeral they released a number of white balloons. When they saw our white balloon land in the back of their 1300 acre ranch, they made an immediate and emotional connection to the event. We had the traditional celebration with Champagne and left them with the Champagne flutes as a memory of our visit. An important pleasure balloonists frequently experience is taking away good memories from the new acquaintances we meet along the way, and in turn, leaving good memories with those we leave behind.



Packing and returning to the launch site was a bit of a chore due to the heat and humidity, but we all pitched in and “got ‘er done”. We drove slowly back home thinking of what we had just done, sharing tidbits and stories of the event. We were a team. Arriving at the balloon shop, we unloaded the gear and then headed home for a much needed shower and cool air. What an experience.

Now we have some local crew who know more about what to do next time. I truly hope those that came out to help know how very grateful we are for their participation. We are also having a post flight dinner discussion and review for the pilots and key crew. I feel it important to review the dos and don'ts for this type of flight so we can do better the next time. How can you do better than a safe gas flight?