

07.25.17

Statement by Trevor Thompson regarding the thermal airship of G-SUNA on Thursday, June 15th in Erin, Wisconsin operating as PIC.

I met the ground crew in the morning at a private airfield about 3 miles from the U.S. Open. We previously received permission from the owner to use his airstrip for our planned thermal airship flights. These flights were hired and designed to provide advertising operations around the US open golf event during the next several days. Our normal procedure is to check the weather forecast on multiple websites including Intellicast and popular ballooning websites called BlastValve and another called Ryan Carlton. I determined that the early-morning winds were not favorable and opted to wait until later in the morning when forecast winds were more promising. At this time we also released weather balloons to confirm the forecast of direction and velocity, the balloons followed the forecast giving us confidence that the weather would hold and winds would soften. At approximately 8 AM local time I confirmed the forecast with the weather balloon again and the winds had softened well within my flight parameters. As a confirmation with more detail needed, I pulled a weather forecast via ForeFlight, after reviewing the data and reconfirming the websites, I gave instructions and briefed the ground crew to begin inflation procedures for the airship and reviewed our plan for the day. After the ground crew briefing, I completed all the preflight check lists that were required at that stage.

We inflate the airship in two phases; one is layout and cold inflation by which we insert cold air via an inflation fan. The airship inflates on its side giving us a chance to do a full inspection in and out before adding heat. This operation proceeded as planned and I inspected the airship personally inside and out and gave it a go for flight. The second stage of inflation requires introducing heat from the burners. First introduce heat to the front of the airship and then to the back, it then lifts and rises above the gondola allowing further external inspections. After completing the final inspection, I did run through internal checklists verifying instrument settings, burner controls and other relevant items to the flight. Approximately 8:30 AM local time I lifted off solo in the thermal airship with four liquid gas propane tanks secured in their aft position. I had planned to fly about two hours before landing with one full tank in reserve. I climbed to 1,000 feet AGL and flew stationary to confirm the forecasted winds against known rpm settings for forward motion. Forecast was accurate and I flew east of the golf course for approximately two hours between 600 and 1,000 feet AGL without incident. At one point in the flight I noted what looked like a sheriff talking to Matt, my ground crew chief, I radioed him and inquired what the issue might be. He informed me that a neighbor was complaining that the noise from the airship was scaring his cattle. I asked for his location so I could avoid his farm during the rest of the flight. My recollection is that Matt did not know the location, so I continued as planned.

After burning through three tanks, I radioed the ground crew and informed them I would be landing to switch out three fuel tanks and have two fuel tanks prepared for me so I would take off with 3 full tanks on my second flight. Landing and changing out three

11

empty tanks with two full tanks went as planned. While refueling on the ground I took advantage of the time and refreshed my forecast noticing that the winds after 11 o'clock were within my flight parameters but would be strengthening a bit and could make flying more challenging. My goal for the day was three hours and I elected to take off with the target of one more flight hour as a goal, weather permitting. I climbed to 1,000 feet and did observe that the winds were a bit stronger than forecasted. After flying for approximately 15 minutes I decided to radio the ground crew and land knowing that I had several other days to fly for the event. The airship has an approximate forward speed of 15 knots I do not like to fly in wind speeds higher than 10 knots because it limits my forward speed capability. At the current levels I was able to fly 4 to 6 knots forward speed. I set up the airship in landing configuration and begin to descend, with the ground crew waiting. I have a drop line that extends 100 feet, I'm able to drop that to the ground crew and they can pull me in. I did not use the drop line on my first landing because the conditions were calm. I chose to use it on my second landing and extended it at about 150 feet AGL. I noticed that it hung up on itself and did not extend the full 100 feet. Above my head is a Plexiglas panel that allows me to vent hot air and replace it with cold air diverted from the engine propeller, which helps me manage my rate of descent. I went to slide back the Plexiglas and it jammed on its slider bar. The jamming of the Plexiglas vent has happened before, in fact I carry a screwdriver in a pouch to my right for this very such situation. Before I could fix the jammed Plexiglas vent, the nose and subsequent rest of the airship caught a small thermal and the airship began to rise. This is not uncommon and with both my rope and Plexiglas issue, it was a welcome pause as it would slowly raise me up allowing me time to retrieve the rope and untangle it and to unjam the Plexiglas vent with my screwdriver. I waited for the airship to level off and it did at approximately 500 feet AGL. Before I could reach for my screwdriver, I clearly heard what could be described as a loud air explosion despite the use of my Bose Aircraft noise cancelling headset. This explosion shook the airship so violently that I feared if my seatbelt wasn't fastened I could have been thrown from the airship. I immediately turned my head upwards looking through the Plexiglas vent and noticed a panel of fabric was completely missing aft of my sitting position on the very top ridge of the envelope. Within very few seconds, I heard a second and third and potentially a fourth air explosion but was unable to visually see the other missing or damaged panels as they were out of my line of sight. The Airship is equipped with two PRV's "Pressure Reducing Valves", one is aft and one is fore on opposite ends of the gondola. They have cords that stretch under pressure and allow air to escape the envelope. This is to prevent over pressurizing the envelope and causing panel damage.

Immediately the airship began to sag as the hot air escaped the envelope rapidly and as I was flying forward, the lack of envelope pressure caused the nose of the airship to push in and wrap around the two burners above me and immediately catch fire. I directly reached down to the manifold at my feet and shut off the fuel supply to the burners. At the time of the air explosions I was wearing only the lap portion of my seatbelt, the shoulder portion of my five point seatbelt was unfastened allowing me to move freely to manipulate the burner manifold at my heels. I then pulled my checklist, the next item was to shut off the main valves on the fuel tanks located directly behind me which would

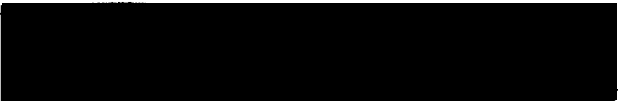
11

require full removal of my seatbelt. I opted not to chance this as I could be thrown from the gondola if another panel explosion were to happen.

Almost as quickly as the fire started, the airship seemed to take a deep breath and pulled most of the fabric far away from me but left behind part of it burning while it surrounded the gondola. I was wearing my Nomex flight suit, often called a pickle suit as well as my Nomex flight gloves. I knew this would only give me limited protection from the fire as I descended to the ground uncontrolled. I had no flight control after shutting down the burners, the engine and the electrical systems. I was completely at the mercy of the fire and gravity from 500 feet AGL. I secured my five point harness leaned forward, using my hands as best I could to protect my face and vital body parts from the heat, the smoke and flames as I descended. I remember seeing the Plexiglas fall around me and feel it dripping on me from the closed vent. I rocked back and forth, trying to figure out how I was going to make it out of this situation. I do not have much recollection of what happened between that point and just before hitting the ground. My next memory is of seeing the ground approach, bracing myself for impact and then hitting the ground hard. In this European made airship the pilot sits on the starboard side and the envelope had enclosed the entire right side of the gondola. When I looked to the port I could see grass and blue sky. I then unbuckled my seatbelt and dove toward the grass and after trying to stand, realized my back was broken and I army crawled about 20 feet. I then heard my name being called, I recognized the voice from Matt, the ground crew chief. I will always remember seeing his face as he came running towards me. He quickly surmised I couldn't walk and pulled me by my arms to safety about 100 feet away when the first of 3 explosions occurred due to the stored fuel in the tanks.

I am grateful that the airship did not land on anyone or anything that would cause additional harm. I commend emergency response teams and emergency personnel for a quick reaction, professional treatment and the highest care.

This is my statement to the best of my recollection to the events of that day.


Trevor Thompson
PIC of G-SUNA

7-28-17
Date