KBTL – KANQ

Official Personal Statement

for

The National Transportation Safety Board

Federal Aviation Administration

by

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The following is my firsthand account of what occurred on January 20, 2022, at approximately 6:45 pm local time:

I (Rebekah Hainline) and my instrument student (Kendra Blackie) were conducting a training flight, Lesson 79 of the WMU TCO of the instrument rating course. We departed KBTL and headed direct to KANQ. During this flight, we planned to practice the RNAV 5 approach into KANQ. After which, we planned to fly towards KAZO to conduct an ASR approach. Finally, we planned the RNAV 31 at KBTL to conclude the lesson. Everything was routine during our first leg to KANQ.

Prior to this flight I had done my due diligence by looking at NOTAMS, getting the current and forecasted weather conditions of the surrounding area, and completing a weight and balance for the flight. I ensured that we had adequate fuel and performance for the training flight as well. All my preflight preparation was standard, and I expected the flight to go well.

Approximately 25 miles away from the KANQ airport, we obtained the local weather. My student briefed the approach and completed all the required checklists. We contacted Fort Wayne approach and requested vectors for the RNAV 5 into KANQ. After the request, we began receiving vectors to the FAF. We followed ATC instructions and were cleared for the approach prior to the FAF and switched to KANQ's traffic frequency. Once within 10 miles of the airport, I turned on the airport lights. Immediately, I noticed that the PAPI for runway 5 was inoperative—there was no NOTAM for the inoperative equipment. Per the instrument approach plate, we began a descent to 2800 feet. We made our standard radio calls on the frequency for the uncontrolled field. Our aircraft intercepted the glide slope when it came alive and began our descent to keep it centered. Before reaching the Decision Altitude (DA), I attempted to turn on the airport lights for a second time to try to turn the PAPI lights on. Again, the PAPI lights did not turn on. Upon reaching the DA, the glideslope and CDI were centered.

When we reached 1475 feet, I instructed my student to go visual. We both were gaining a grasp of our depth perception at the airport. As there were no lights in the airport vicinity, other than the runway lighting, there was an extreme "black hole approach" optical illusion. My student makes the callout on frequency at 2 nautical miles from the runway. We

continued our visual descent at a normal rate to the runway with our CDI centered when we made impact with the top of a tree. We saw it while we hit it. There was no time to react before impact.

I immediately announced that I had control of the aircraft and started getting the plane to the runway. I was able to add power and continue controlling the aircraft. I landed our aircraft on runway 5 at KANQ. After we landed, I announced on the UNICOM frequency that we were on the runway. After checking to ensure that we were both unharmed, we proceeded to taxi the aircraft to the FBO at the airport. Fortunately, no injuries occurred. Once safely parked at the FBO, and we safely shut the plane down following the proper checklists (mags off and grounded), we were able to exit the plane safely and inspect it for any leaking fluid and additional damage. Simultaneously, I called the Supervisor of Flying at WMU to help facilitate the upcoming process.

I believe that this situation happened due to the black hole approach optical illusion in conjunction with the PAPI lights being inoperative. Once we had exited the aircraft and I was in contact with personnel at WMU, an employee of KANQ came out to the airport to do a FOD check of the runway. While we were talking to this man we mentioned that the PAPI lights were inoperative. He responded by telling us that this is not abnormal at KANQ. This concerned me that a piece of equipment was routinely not functional at this airport, and it did not seem to worry the staff that a NOTAM is unavailable when this happens. Due to there being little to no ground lights surrounding the airport to assist with depth perception, I believe that the PAPI lights are a crucial part of a successful visual descent at KANQ at night.

In conclusion, this experience will make me a better pilot going forward. From the moment that the tree impacted our aircraft, there was no panic in my mind. I immediately sprang into action, and my only concern was to get my student and our plane on the ground safely. Kendra and I are not hurt today because of the extensive training that I have gotten at WMU over the past three years. My training is the reason we were able to land on the runway without injuries.

I know that the best pilots are always learning, and I will take this as a serious educational experience. I will recover from this experience by diving deeply into "black hole approaches," optical illusions, and night flying. By learning about these topics, I know that I will better equip myself to ensure that this will never happen again. I will continue to research RNAV approaches, LNAV/VNAV approaches, and glideslope indications to ensure that I am overly

proficient in these subjects going forward. In addition, I plan to fly at night with a lead flight instructor at WMU and ask them as many questions as I can about how to gain and retain night flying efficiency. I also plan to reach out to David Schrader, Associate Director of Standards and Safety at the College of Aviation, to become involved in the safety committee at WMU's College of Aviation. If there is anything in my power to ensure that this never happens again to myself, my student, or any other pilot at WMU, I plan to follow through on those actions.

Respectfully,

01/24/2022

Rebekah Hainline
Certified Flight Instructor, Instrument

My name is Kendra Blackie and I am a student at Western Michigan University. I am currently in training for my instrument license and was involved in the occurrence that took place on January 20th, 2022. This was my lesson 79, which was a dual flight lesson with my instructor Rebekah Hainline. Our flight was originally supposed to be at 1630 but due to resources, we pushed it back to 1800. This meant it would be a night flight, I was under the hood. My instructor said I would be able to get my night currency since I have not had a night flight since my private pilot's license. After I pre-flighted, we were departing from KBTL runway 31 and we planned to do the RNAV approach into KANQ. I plugged the information into the FMS. After we were cleared of the airspace, I picked up KOEB's AWOS to get an idea of what runway we should expect. We were continuously obtaining the weather during the flight until we were within reach to obtain KANQ's weather which also confirmed we would be using runway 05. I had contacted Great Lakes Approach prior to this and had been talking to them. They were giving us vectors until we were lined up on the approach course. I had completed my ABCs (atis, briefed, and checklists). At this time I was using autopilot. Our altimeter matched the updated weather ATC gave us reading 30.49" Hg. They told us we were cleared into the approach and could switch frequencies.

We were established on the approach at 3,000' on the RNAV 05 into Angola. We then descended to AVROY at 2700'. I made my continual callouts as the altitude approached us. When we hit our final approach fix and the glideslope showed we were one notch above center, I did my first notch of flaps to 50% and completed my six T's (time, turn, twist, throttle, talk, touch). This was when I made my radio call that we were inbound on a 5-mile straight-in to runway 05 at Angola. We continued my descent while following the glideslope and maintaining the centered CDI. When I was 2 miles out I made my call to the CTAF again letting them know where we were. Once I hit my altitude, then I was able to descend down to my decision altitude of 1474 feet. I made my call that "I reached my decision altitude of 1474'" to my instructor. She told me I could take off my foggles. At this moment, I was completely centered and continued my descent. My instructor taught me multiple times that once we "break out of the clouds," I would switch to visual references. I have done this during day flights multiple times. I moved my eyes visually to the lighted runway. I continued to glance at the glideslope. The glideslope was bouncing around with every light adjustment. I said to my instructor Rebekah that the glideslope was showing we were low. However, my instructor and I discussed that the closer we are to the runway, the more sensitive the glideslope is. I was also taught to not chase the glideslope. And I spoke exactly that out loud to my instructor and she agreed with me. We were coming down to land, I could clearly see the runway and this looked like the typical landing I do every single flight. There was no PAPI system and no specific NOTAM out for the lack of one. Shortly after, a tree appeared in front of our eyes at almost the same time as impact. My headset fell off my

head and onto my IPad when we hit the tree. We both couldn’t believe it happened because everything had seemed normal until that moment. My instructor took the controls and we stretched our landing to make it onto the runway. Our airplane's glide did seem slightly less than normal. We were able to land the aircraft safely onto the ground and taxied to park at the FBO.