

Theory, Practice, Knowledge

Monte Belgarde
Angle of Attack Aeronautics

Butte, MT 59701

June 28,2020

Mr. Luke Watters
Aviation Safety Inspector
Helena Flight Standards District Office (NM-05)

Helena, MT 59602

Luke,

Thank you for meeting with me to discuss the circumstances relating to the events involving Twin Cessna N87395 that occurred June 15, 2020.

Per your request, I am providing you with a written account of the events that occurred at 7S1 and BTM (The Twin Bridges and Butte Airports, respectively). Following is a brief chronology. All numeric values are estimates and time periods are local.

- 08:40 Departed BTM enroute to 7S1. Departure, Enroute and Destination weather was VFR. The aircraft had full fuel (163 gallons) and I was the sole occupant.
- 08:50 First radio call (Silver Star, Montana) on CTAF to 7S1: No Response. Retried transmission, Checked Audio Panel, conditions appeared satisfactory. Retried Transmission / No Response.
- 08:53 Second Radio call on CTAF, no response. Transmitted in the blind aircraft position and Intentions: "Twin Cessna 395 Three Mile Final Runway 17, Landing Twin Bridges."
 - Aircraft configured for landing. Traffic Scan performed.
- 08:55 Third radio call on CTAF: Announced aircraft position and intentions:"395 1/2 mile final, Runway 17, Landing Twin Bridges. ¹



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It was after this radio transmission that the birds² were spotted taking flight from the first Fence³.

Initially, the bird's trajectory and speed did not appear to be in conflict with my flight path. For the most part, I continued the landing sequence and performed only a mild, precautionary, evasive maneuver (a turn away, and down) as the bird approached from the aircraft's right side.

After the bird passed, I spotted the second fence, and realized how low the aircraft was, but still felt that I could perform a safe landing. I responded by initiating a power increase.

The aircraft's left main landing gear contacted a fence post, and the top two strands of a barbed wire fence (on the second fence). This resulted in damage to the gear.

After performing a go-around, I made the decision to return back to BTM (to determine the actual condition of the gear and, if needed, have emergency services availability).

When I arrived at BTM, I placed a radio call to the FBO (Butte Aviation) and requested a visual inspection of the suspect gear. I believe I performed three overhead passes after which, confirmation was received, via radio, that the left gear was not fully down. It was at this time that I made the decision to fly to Butte's West Practice Area (5 miles from BTM) to try and remedy the problem.

After exhausting all of my available options for lowering the gear, I decided to burn off as much fuel as practicable, and land at BTM.

Prevailing weather conditions favored utilizing Runway 33. Several passes were made in an effort to determine how the aircraft would perform under different configuration changes. The most viable was flaps up, right wing low.

I announced my intentions to land on Runway 33.

Crossing the runway threshold, the mixtures for both engines were placed to the Idle Cutoff Position and the aircraft was landed right wing low, with the flaps up.

Explanation of Superscripts

- 1. Personal Operating Practice / Habit
- 2. I visited 7S1 on June 26,2020. After which, I remembered the two bird scenario: A small and a Large. ONLY the large bird was a factor,
- 3. There are two fences: I did not recall this during our last meeting.



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During our last meeting of June 23, 2020 you posed a valid question that I could not logically explain. You said: "I am having a problem, you said that you spotted the bird at 200 to 250' AGL, how did you get from this altitude down to where you hit the fence?"

This bothered me, and it prompted me to visit 7S1. I now have the answer. When you asked me the question, I did not remember that there are two fence lines. This first fence is 1493 feet North of Runway 17. The second fence is 820 feet from the Runway threshold. The bird took flight from the first fence. Also as noted above, there were two birds (small bird not a factor, maybe a baby).

Both fences have nominal post heights of 60". Using this value, a 3° approach angle, and the end of the runway as a benchmark (900' distance to the fence), the math indicates a 47' crossing height at the second fence for a normal (Short) approach. Using the same math (Trigonometry), I more than likely spotted the bird somewhere in the neighborhood of 150' AGL, and not the 200 to 250' as discussed in our post-accident interview.

Please call or write with any questions or comments.

Thanks in advance for your time and consideration in this matter

Monte Belgarde