Michael Folkerts

From: Michael Folkerts

Sent: Wednesday, October 25, 2023 5:07 PM

To: Michael Folkerts

Subject: FW: perspectives from student of CFI

From: Andrew Hossack

Sent: Monday, January 16, 2023 16:01

To: eyewitnessreport < eyewitnessreport@ntsb.gov >

Subject: Re: Regarding CEN23FA077

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As a revision, I'd like to note that I mentioned the photos of the light strips were similar to N22859. The photos are actually from a video recording of the plane, N22859 on 1/7. I can send the full video if you'd like.

From: Andrew Hossack <

Sent: Monday, January 16, 2023 2:28:47 PM
To: witness@ntsb.gov <witness@ntsb.gov>
Subject: Re: Regarding CEN23FA077

Apologies, sent the preliminary message by mistake.

My name is Andrew Hossack, I was a student of Colton Hill, the pilot of and one of the two people involved in the fatal accident on 01/11/2023 N22859 in southeast Nebraska. I have flown 8.4 hours with Colton, of which 3.2 hours were in N22859 on 01/07/2023 and 01/08/2023 from the Lincoln airport LNK.

I have a few observations about the aircraft, as I have flown in it with Colton, and of Colton as my CFI in general.

Colton was a skilled pilot, who did not seem to take any risks. His personal minimums for wind was up to 20kts, but he definitely was skilled enough to fly in them in the 172. I have no complaints about his knowledge or skill as a flight instructor. One thing to note is that during one of our night flights, he did forget to turn on the instrument backlights for the plane and instead we relied on the overhead red lighting.

Before the incident took place, we were flying with another 172 that was leased out by Pat MacInteer, who I have not met in person but have spoken on the phone with a few times. Colton worked for Pat under contract I believe. Colton and I had originally had been flying in the 172, up until early January when the 172 was damaged. The Cessna 150 N22859 was a loaner plane that we were using when the 172 was in service. Colton as far as I know did not have much time in the 150.

On 1/7, Colton and I took N22859 out for some maneuver training. We did slow flight, stalls, simulated engine failures. From that day, I observed four things:

1. The stall warning horn worked as expected and seemed to indicate a few kts+ before a stall occurred.

- 2. I did not notice any external or structural damage to the aircraft, and neither did Colton. The runup and flight performance of the aircraft seemed normal.
- 3. The aircraft during power-on stalls seemed like it did not want to stall, eg. we had to reduce engine power from a full-climb power configuration by a few hundred rpm to get it to stall.
- 4. This next point is, in my opinion, the most important. I noticed that in the cockpit, there were LED light strips very similar to the photos I have attached. Photo 1 shows where the LED strip was mounted, and how it was pointed down over the top of the instruments. Photo 2 shows the remote control, and 3 shows the cigarette lighter plug from which the LED strips were plugged into (lighter plug has a red light on it in the bottom right corner of the screenshot). Colton mentioned to me that at night (referring to another night flight he had earlier in the week), it was difficult to see the instruments since they were in-set, and the light was facing straight down over the top, rather than pointing at the instruments. I believe this would have made viewing the instruments at night difficult. The power connector was next to the right-side seat's knee which could have become unplugged. I'm not sure if the instruments had a backlight or ceiling light.

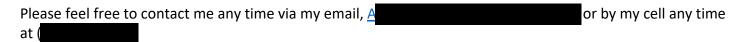
On 1/8 in N22859, we had another flight to practice power on/off stalls, slow flight, simulated engine failure and ground reference maneuvers. The aircraft felt stable during flight and did not give me any indication that something was wrong with the engine, structure or avionics.

Another thing I have observed about the aircraft was that Colton mentioned that there was no ADS-B in. He always took up an iPad with Foreflight app with him during our lessons for help navigating. In N22859 there were also no modern avionics like the Garmin GPS that we had in the 172. I believe that this made cross countries and navigation rely on the use of the onboard VOR instrument.

To summarize, I think that there are definitely a few factors that can be looked into:

- 1. N22859 was a new plane that Colton and his student were flying in and not completely used to.
- 2. The aircraft had no modern avionics onboard, and the lack of ADS-B in made Colton and his student rely on VOR instrument for navigation. They were <1 mile away from the airport (~900" field elevation) at 3700" at cruise speed when the accident happened (which seems high and fast), which is where ADS-B stopped reporting.
- 3. Colton mentioned that the LED strip lighting made it difficult to see the in-set instruments during one of his previous night flights in the plane.
- 4. The airport K01 they were flying into was in S/E Nebraska. There are not many visual references out in the country at night which I can attest to. I'm not sure what K01 looks like at night. Possibly night flight illusions.

I don't want to speculate on what happened, but it seems like a possibility that they navigated close to the airport, were trying to read the VOR when something happened to make the plane lose control and go from 3700" to 900" within 30 seconds (nearly a straight/nose-down attitude), according to ADS-B. Possible that it being so dark outside with a non-instrument student pilot and Colton paying attention to the VOR could lead to a student's night flight illusion, and a nose-down attitude in response.



Colton was a friend of mine, and I am hoping to get some closure out of the NTSB flight report. if there is anything I can do at all to help, please let me know.