



To: Thomas Little, NTSB

From: Nicholas Otterback, Arion Aircraft LLC

Re: N929GB Zenith 601XLb

Date: 1/03/2018

This letter is in regards to the accident involving N929GB a Zenith 601XLb piloted by a Mr Jerry Travis. The aircraft was last serviced at our Facility in Shelbyville TN, KSYI Bomar field. This letter is to inform interested parties as to the state of the aircraft upon arrival, what service was provided, and the circumstances involving the departure. These are only observations, no facts or analysis are implied in regards to the accident on 12-21-17.

Arrival.

I don't remember the exact date the aircraft arrived at our facility. Aircraft can show up a few days or week early due to weather, it was however the middle of August. Upon arrival on our ramp, both our A&P and I noticed the left brake assembly was dragging behind the aircraft by the plastic brake line. The bleeder valve had been worn off and all fluid from that side drained. We asked if Mr Travis had any trouble and the comment was "yes it was kind of difficult to taxi and land". We showed him the brake and he said those were just replaced.

As with any aircraft which arrives we discuss the service which is wanted. In this case the only service at the time of arrival was the installation of a Gemini Autopilot from TruTrack. While discussing this Mr Travis noted he had drilled out all the rivets holding the forward deck skin in place to fix a canopy issue and look at the AP wiring. He opted at that point to bring the aircraft to us for the install. The observation here is that the forward deck skin was only secured back in place with 2 rivets total, One rivet on each side into the upper longeron. The forward section was held down by the overlap of the upper engine cowl. The rear was not secure. You will need to reference the Zenith Cad drawing for total rivets, however the amount required is far greater than 2. We still have the old forward skin here if it is needed for some reason. We did eventually install a new skin per the Zenith manual, the new skin was provided by Mr Travis.

Autopilot installation

The AP install began on 8/28/17. This was straight forward except the state to which the Elevator pitch cables were found. The cable tension was so loose that the cables could be moved in any direction several inches. The required cable tension per the manual is 30lbs, our



tensioner would not read any value. This of course was corrected to properly interface with the pitch servo, and the AP install completed. Of note is the placement of the Pitch servo. The pitch servo could not be installed in the exact position as stated in the installation guide due the original construction of the aircraft and rudder cable placement. Other Zenith 601 installs show the servo installed to the bottom of the baggage deck to correct this problem. This is where the pitch servo was installed. The installation here had no effect on the operation of the system or the pitch system upon post installation tests.

Further Service

Mr Travis had surgery around about the time we had finished the AP install and asked if the aircraft could remain with us. We had room and that was no issue. His recovery was going slowly. At some point in September he requested we complete a Condition inspection on the aircraft so when he was ready he wouldn't have to worry about it. It was not due until February.

We performed an inspection in October, it was signed off on 10/10/17. Items found during the condition inspection are in the aircraft and engine log books. Several minor issues were found but nothing greatly disturbing.

Of note. The Zenith design originated in Canada from Zenair. The Canadian Safety authority had issued on 1/01/17 an Aviation Safety Advisory A16O0137-D1-A1 for the inspection of the horizontal tail attach points. This was for Canada only, and due to the experimental nature of the aircraft not mandatory to the design or US. We discussed this with Mr Travis, and strongly advised him to consider the inspection he declined. It would take several hours and requires the removal of the tail. This is noted in the log book for reference only that it was declined but did not affect the condition of the aircraft as it relates to US requirements.

Mr Travis did also request the installation of the main wheel pants which were not installed at the time of arrival. We did install those parts.

The Radio, an ICOM A210, was also found to have severe RF interference during inspection. It was removed and sent to ICOM North America for repair. It was repaired and reinstalled. A ground test was performed to find it working correctly.

Delivery Discussion

Before the end of November I was asked if delivering the aircraft to his home airport was an option. Now I want to make a point here that has absolutely nothing to do with the aircraft or accident in question. I have been flying experimental aircraft for 20 years. I do not just get in an



experimental aircraft and fly them. The only EXP aircraft I fly are those which my company has assisted in construction, ones that I have personally built, or those built by very close friends that I trust with my life. I am not saying that this aircraft was unsafe in any fashion. However, I was not going to fly it. I was asked and told Mr Travis that if it absolutely need be I would make an exception, but didn't want to. I then told him that there was no hurry in getting the aircraft, we had plenty of room in the hangar and it could stay until he felt he could get it, or someone else could.

Departure, Accident Date 12-21-2017

The weather for several days before the accident was below VFR. I was at the bank when our A&P called and said Mr Travis was at the shop and wanted to take his aircraft home. This was of complete surprise to both of us considering the weather and no phone call saying he was coming. I checked aviationweather.gov while at the bank to see what the conditions were, it was well below VFR. I hadn't even cared to look that day because it was so low.

I told Mr Travis that I was surprised to see him due to the weather we were having and asked if he looked at it. His only response was that it was lifting and would be fine. I then told him that the weather in Shelbyville was 400 overcast and really not good for flying. I also told him that Nashville was reporting the same. I again asked if he wanted to go, and maybe he should just come back when it was better. He said no I will get it today the weather is fine and I know the area I am flying to.

The aircraft was pulled out of the hangar. Mr Travis asked if I could taxi down to the fuel pumps with him and on the way show him a little about the Ifly GPS. So I did. The right tank appeared to be mostly full with autofuel (it was yellow in tint and smelled like it). The left tank was fueled with I believe 8-9 gallons of 100ll. I do not know which tank he departed on. I walked back to our hangar from the fuel farm. He was right behind me taxiing after fueling up.

Mr Travis taxied back up to the Arion Aircraft ramp and said the GPS Turned off. It had come unplugged from the 12v source in the panel. We plugged it in and it turned back on. His last comment to me was "How much runway do we have here" I answered over 5,000', he simply said ok.

He taxied away from our ramp which is on the north side of the airport and west of the runway and main taxi way. He turned the aircraft south into the wind on the parallel taxi way and advanced the throttle to full. About 3-4 seconds in to the take off run we saw dust flying and could hear the aircraft rattling loudly as it left the taxiway to the east side into the grass. The run in the grass was a few seconds before liftoff. Prior to lift off we heard a very loud bang, like



he hit something, the aircraft then lifted off nose high. During the initial climb out the aircraft had a very high nose attitude and appeared to be wallowing left and right. It was at this point we could clearly see something venting from the left wing. It was not water spray as the ground was not wet, it looked like fuel venting from the tank, but not sure. Eventually the nose was lowered and the aircraft gained speed on a south heading very low. Before reaching the south end of the airport the aircraft made a high banked left turn to come around on a north west departure. I would estimate in excess of 60-70 degrees. The aircraft exited the area on a North West heading almost directly over our hangar at around 200 feet.

No warm up or run up appeared to have taken place prior to departure. I don't think he even had time considering the time elapse from fueling to departure. Once in the air, we did not hear any reduction in the throttle as it flew over, the engine sounded to be running wide open.

Of Note. The Fueling and departure was also witness by several employees of the Shelbyville Airport. When I called to report the unsafe activity to them, they responded with "yea we saw it too". The Airport Number is [REDACTED]

Witness Back Ground

Both myself and our A&P Jason Biggs were witness to the above events. We are both in the shop, so items found with the aircraft we are both well aware of and discuss. Any time Mr Travis was here both of us were present.

Nicholas Otterback: Arion Aircraft Chief Manager. 22 years flying, over 5000 hours in all types


[REDACTED]

Jason Biggs: Arion Aircraft A&P. 10 years experience on Experimental and LSA aircraft.


[REDACTED] Jan 2018

From: [Jennifer Roy](#)
To: [Lyle Thomas](#)
Subject: Fwd: Plane crash on my property at [REDACTED] Franklin, TN. 37064
Date: Wednesday, December 27, 2017 1:37:54 PM

-----Original Message-----

From: [REDACTED]
To: [REDACTED]
Sent: Tue, Dec 26, 2017 4:30 pm
Subject: Plane crash on my property at [REDACTED] Franklin, TN. 37064

On Thursday December 21, 2017 at approximately 12:30 PM to 1:00 PM a fog bank rolled in at ground level. I heard a loud boom and I ran to the barn thinking something had blown up, not seeing anything I went around to the back of barn where I saw my renter, Alana Grell, standing and yelling to come there. I looked up and saw a plane down in our front pasture and also heard my neighbor Mr. Gray coming up on his four wheeler yelling not the cell tower. I arrived at the plane at which time I checked for a pulse on the pilot, which was 47 beats. The pilot was slumped over the controls and his left arm and hand were outside the plane door. It appeared his neck was broken, I cleared out his airway, found his teeth clenched, and he appeared not to be breathing. I held his hand and told him rescue was on the way, he never opened his eyes or appeared to be conscious. Mr. Gray had turned the ignition switch off. I never heard the plane engine but I did smell gas and found the fire extinguisher, which was located inside the plane. Williamson County Sheriffs Department and rescue units appeared on the scene and pronounced the pilot deceased.

I did write a statement for the Williamson County Sheriff Dept., in my own words, on what had occurred on and before the accident. I do want to stipulate I did not hear the plane engine but my neighbor Mrs. Reid stated she did. Also the fog came as quickly as it left and may have been at tree level, although I was thinking it was at ground level.

Please feel free to call if you have any questions. [REDACTED]

Sincerely,

Jennifer Roy

[REDACTED]
Franklin, TN. 37064

RE: WPK 8FA053
ZODIAC 601XL
N929GB
Thompson's Station
Dec. 21, 2017

PERSONAL statement
of
Jared Lloyd
12/30/17

On December 21, 2017, I was driving east on I840 near Robinson Road. At approximately 12:54 pm CST, a small white plane with red trim appeared, flying west, an estimated 1/4 mile ahead of me. It had just cleared the high tension power lines that cross I840, east of Robinson Rd. The plane was an estimated 150-200' high. When I first observed the plane, the fuselage was at an estimated 10-15° (NE → SW) angle to the road surface, but flying parallel to and directly above the interstate. As the plane approached, I noticed the fuselage moving from side to side in a slow movement. As the plane flew over, I noticed that the engine was running at a high RPM. As I continued, I looked for the plane in my rear view mirrors. When I saw it again, it had continued to fly west, along the eastbound roadway. At that point, I saw the plane dip slightly and then pull up with a banking turn. At this time, I cannot state with 100% certainty which direction the craft was turning. That was the last point at which I viewed the plane. At 12:55 pm CST, I sent the following text to my girlfriend: "THAT WAS CRAZY. I'M ON 840 AND A SMALL AIRPLANE, NOT A CROP DUSTER, JUST BUZZED THE INTERSTATE. VERY LOW."

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The actions of the plane concerned me enough that I continued to watch the horizon for smoke as I continued east.

At 11:00 pm, I saw the local news about the accident. At 11:19 pm eastern, I called the NTSB Ops Center and gave a statement.

11:00 a

VII

Jeff Lloyd

Chart Tw 37419

Mr. Little,

When I first saw the plane, my immediate thoughts were that it was a crop duster coming down to spray a field or land. These thoughts were due to the altitude and angle to the roadway.

The movement of the plane gave me the impression that there was a slight crosswind, or a control issue, causing me to continue to watch it.

The prop was spinning fast, not at an idle rpm.

As I stated in our phone conversation, I cannot state with 100% certainty that the craft banked to the North or South. However, after many hours thinking about this, I feel very very confident that the plane actually turned to the North, following the roadway. I viewed it in my mirrors at this point.

Just my Thoughts After the many hours of thoughts and "Replays" in my head:

I personally feel that the gentleman was trying to land the craft on the interstate, but due to the cars on the roadway, he wasn't able to without possible harm to others. The flight was just "so direct" over the Roadway.