

Lynn Spencer Aviation Investigator Eastern Region, Office of Aviation Safety (ERA) National Transportation Safety Board

Date: 7/10/2020

Summary of airplane examination NTSB Accident Number: ERA20LA237

The following information was received via phone conversation and subsequent field notes from Piper Aircraft. NTSB did not travel to the accident site due to Covid restrictions.

- Following the accident, the airplane was moved from the runway and tied down at TIX.
- On July 10, 2020, the airplane was examined. Present during the exam were Karen Lunde and Rob Melcher from the FAA, Justin Hopman (Airport Manager), and John O'Neill, Kelly Peters, Bob Martellotti from Piper Aircraft.
- Mr. Melcher stated that they used a tow truck to move the airplane since the nose gear was "spinning;" they clamped onto the nose wheel. The left main landing gear (LMLG) was skidding, and went flat, so they placed a dolly underneath it for towing. Photos were requested.
- Inspector Lunde reported that the left side of the fuselage skin was buckled above and below the wing area between fuselage station 160 and 180. The fuselage to wing fairing was partially separated (leading edge and bottom of wing area).
- The nose gear fork was bent to the right. Cross tread scuff marks were observed on the tire tread. Nose tire pressure was recorded at 91.0 psi. The nose landing gear (NLG) steering horn was separated from the top of the nose landing gear tube assembly. All three bolts that secure the steering horn were fractured. Two out of the three bolt heads were missing, and the third bolt head had been retained by safety wire. The steering horn was resting on top of the NLG assembly. The three bolt ends remained in the NLG tube assembly.
- Witness marks were observed on the left aft side of the steering arm and corresponding engine mount plate (left turn stop) and on the lower right turn trunnion stops. No witness marks were observed on the lower left trunnion stops. All steering components with the exception of the horn, were in-place and intact.
- Flight control continuity was established from the cockpit controls to their respective flight control surfaces. Nose wheel steering continuity was established from the rudder pedals to the steering arm assembly.
- Left Wing: The left outboard wing section was impact damaged up and aft. The leading edge of this section was crushed aft about 4 inches. The aileron was buckled near mid span. Onscene photos noted the main gear torque links were disconnected, and the torque link bolt

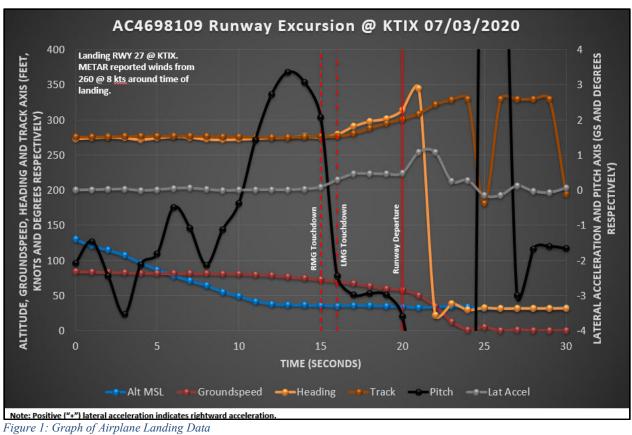


was hanging on the brake line clamp and the locking nut and cotter pin were not in-place) and not located during the examination. The torque link bolt was bent, and thread damage was noted at the cotter pin hole location. Unknown material was noted wrapped around the threads near the bolt shank. The tire was deflated and off the rim.

- No visual damage was observed on the right wing or empennage.
- 51.8 hours on the Hobbs meter
- The engine was not examined. The propeller remained attached to the engine. The outboard section of all five composite blades were destroyed by impact with the terrain.
- Runway: FAA reported that runway markings indicate that the pilot landed short at the intersecting runway, just left of center. Markings showed that the airplane travelled "straight" until the hold short line then started to veer 10-15° right, crossed over centerline right about at the threshold. There was no evidence that the LMLG was tracking anything but forward. The skid mark from NLG started about 30 ft beyond the MLG mail gear.
- Data was downloaded from the SD card (upper slot MFD), and the Garmin Flight Deck G3000. The data was sent to the NTSB, and the FAA retained the SD card for shipment to NTSB. (See Figures 1-4)
- FAA retained the Steering Horn Assembly, LMLG Upper Torque Link, LMLG Lower Torque Link, and Torque Arm Bolt and shipped these items to the NTSB Materials Lab for further examination.



Garmin Flight Deck G3000 Data





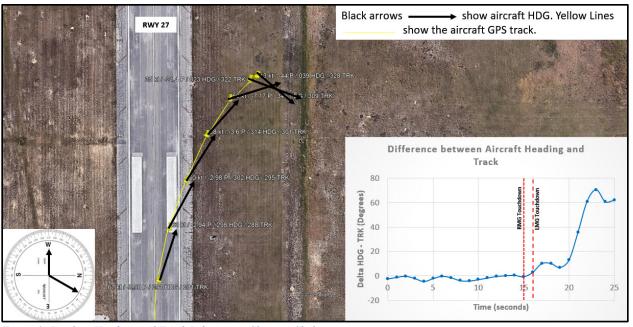


Figure 2: Landing Heading and Track Information Showing Skid



Figure 3: Touchdown and Rollout Plots





Figure 4: Approach to Runway Plots