



RECORD OF CONVERSATION

Michael Hicks
Air Safety Investigator
Western Pacific Region

Date of Conversation: 02SEP2020
Person Contacted: FAA Inspector Luke Watters
NTSB Accident Number: WPR20LA278

Summary:

Inspector Watters:
02SEP2021@0652PST

Good morning Michael,
Myself and two airworthiness inspectors travelled to Bozeman to inspect the aircraft and speak with the pilot. We ran the performance numbers for that day and while the aircraft was loaded to max gross takeoff weight, the books show it still should have had a climb rate of about 350fpm. When we inspected the aircraft, we noticed the propeller was not curled like it typically might be in a high RPM crash. Also, the pilot stated the controls were in the same position as during the crash. The mixture was set for takeoff, the throttle was backed out and the carb heat was somewhat backed out.

When I asked the pilot to talk me through the takeoff and departure it became apparent that he was in the habit of adding full throttle on the runway and then immediately removing his hand from the throttle and placing it on the yoke. He stated the aircraft was about 100' AGL and not climbing anymore and he just kept it in control all the way back to the ground. I asked him if his hand was on the throttle at any point during takeoff/departure and he stated no. He stated that it was common for him to fly with two hands on the yoke during takeoff. Based on this and the evidence we saw it would be our best guess that the aircraft began losing power due to the throttle backing out on takeoff roll and the initial departure climb.

Let me know what else you need or if you would like to speak with one of the airworthiness inspectors.

Inspector Watters:
02SEP2021@1036PST

Michael,
Based on the performance charts and the conditions of that day (max gross takeoff weight, 80 degrees F, density altitude around 6,400) the aircraft was expected to take off in about 3,600 feet

and climb at a rate of 350fpm. The pilot stated he was only getting an initial climb of about 100fpm and then the aircraft began to descend. I went through all the calculations multiple times with the weights, temperatures, etc. and concluded that the aircraft should have been able to perform safely if producing full power. The pilot was unable to explain to me why he set the mixture the way he did for takeoff (he was just using a guess instead of setting it for max power) and he was also very clear that he did not keep his hand on the throttle. The type of throttle quadrant on the Cherokee 140 is very susceptible to throttle creep especially if the throttle control friction lock was not set properly. I have many hours in this type of aircraft, and it is not uncommon for the throttle to back off if you don't keep your hand on it throughout takeoff/climb. Also, if the pilot did not set the mixture properly that would result in a loss of (some) power. Lastly, if the carb heat was partially on (as it appeared to be upon examining the cockpit) this would also result in a loss of power. When I asked these questions to the pilot, he agreed it was very possible the aircraft power was suffering due to his lack of monitoring these controls.

Airworthiness inspectors were Bryan Hanson and Tracy Brendall (trainee).

-Nothing Follows