



NATIONAL TRANSPORTATION SAFETY BOARD

Eastern Region – Ashburn, Virginia

Summary of Record – FAA Inspector's Written Statement

Who: FAA Inspector Russ Standifur, Nashville FSDO

The following is an excerpt of a written statement prepared by FAA Inspector Russ Standifur, who examined the airplane at the accident site and at the salvage yard after the airplane was recovered.

On October 29, 2021, N30SH departed Gallatin Airport (XNX) around 1700 to which the aircraft engines quit descending into Humphreys County Airport (0M5). The pilot made a decision to land the aircraft in a field approximately 2 to 3 miles from the airport.

The aircraft skidded approximately 100 feet and hit a hay bale which spun it 180 degrees in the opposite direction before coming to a rest on its belly.

A visual inspection was performed on the aircraft at the scene to which the following damage was noted: the left tip tank with partial wing structure was found 25 feet from the aircraft due to impact with the hay bale, the landing gear collapsed up under the aircraft, both flaps were damaged, and both propellers were bent backwards. No visual ground scars or propeller damaged revealed that either engine was under power when the aircraft impacted the ground.

Each fuel tank was visually inspected and little to no evidence of fuel could be found. All fuel access panels were secure along with the fuel caps. No signs of past or current fuel leaks could be found on the aircraft as it sat, to which a request was made to the aircraft recovery company to inspect and take pictures of any noticeable fuel leaks once the aircraft was raised for removal.

The aircraft was removed, and the aircraft recovery company reported no obvious fuel leaks when it was raised.

The pilot provided a verbal account on the phone during the day of the inspection, and he stated that he left Gallatin airport to make his way back to Arkansas, but his expectation was that he would have to stop due to weather because the aircraft was not legal to fly in IFR conditions due to overdue avionics inspection that were due on the aircraft.

Once he was airborne, he noticed the aircraft auxiliary tanks were almost on empty so he switched the selector to main tanks, to which he decided that he would land his aircraft at

Humphreys County Airport.

Once he got close to turning the aircraft to final for the runway, the left engine quit and he immediately feathered it, but he proceeded onto final to which the other engine quit.

He evaluated his position and realized he would not make it and maneuvered the aircraft to open field and attempted to land it.

His recollection of the last time he put fuel onboard and the flights he made afterward including this one he believed he should have had enough fuel onboard and did not understand how it ran out of fuel.

Research of the flight operations and fuel receipts of this aircraft by the inspector revealed the possibility of the same conclusion of having the proper amount of fuel on board for the time the aircraft was operated.

Aircraft engine performance research revealed the aircraft should have had approximately 30 minutes of additional fuel onboard up until the engines quit for the total time the aircraft was flown from the last time it was fueled. (Note: The calculation used was for running the engines in extreme rich and flight times were extended approximately 30 minutes to an hour over and beyond what was considered to be flown)

Inspection of the aircraft at the aircraft recovery company on Nov. 1 revealed a small amount of fuel in the fuel strainers that were located on the bottom of the fuselage. The aircraft wings were inspected again right side up and another inspection of the fuel tanks were performed that revealed little to no fuel was found.

Another inspection of the aircraft was performed on Nov. 5 due to the findings of the aircraft engine performance research. The main goal for this inspection was finding any possible fuel leaks to account for the possible missing fuel.

The right wing was lifted and placed in a bottom-up position to which the inspector noticed a blue fuel stain covering the wing root area coming from the main tank area. The aircraft recovery owner was questioned why he did not report this leak as instructed and he did not believe this to be a concern because he thought it was an old leak.

Inspection of the fuel stain by the inspector found it in a condition to be considered an active leak up until the aircraft accident. Inspection of the right wing found no noticeable fuel leaks coming from the main tank after it was removed. A fuel line that was cut off for the removal of the wing for transport was found loose to which further inspection revealed the other end of this line under a small inspection cover next to the wheel well was connected to the auxiliary tank with clamped rubber hoses. Movement of this line revealed the line was loose enough and would move inside the rubber hose even though it was clamped. Further inspection found evidence of fuel leaking coming from the loose clamps to which it looks like the fuel would travel down the main spar internally and come out in the wing root area externally.

The left wing was inspected in the same position and no evidence of fuel leaks were visible. An inspection was performed on the same suspected auxiliary fuel tank line, and it was found tight, and the clamps were tight. Observation of the hoses revealed they looked to have been replaced recently.

A phone interview was conducted with an individual that returned the aircraft to service after performing an annual inspection on October 08, 2021. He stated that he fixed a leaking fuel line in the wheel well area on the left wing even though the logbook entry describes the right wing. The inspector made him aware of this discrepancy and he stated he sometimes gets his left and right mixed up and the logbook entry is incorrect. He stated they replaced some hoses that were connected to a fuel line.

Based on the wing inspection findings the inspector concludes there was an active fuel leak on this aircraft to which an unknown amount of fuel was lost during the operation of this aircraft.

Aircraft logbook documentation has been reviewed and found satisfactory. The pilots medical and airman certificate was found satisfactory.