



MEMORANDUM FOR RECORD

Brian C. Rayner
Senior Air Safety Investigator
Eastern Region

Date: September 6, 2022
Person: Nicholas Nickleach – Pilot/Owner
NTSB Accident Number: ERA22LA039 Zelienople, PA
Subject: Bell 47

Narrative:

Mr. Nickleach was the pilot of the accident helicopter. He holds commercial single-engine instrument, flight instructor single engine. Total flight experience was 340 hours, of which 53 hours was in helicopters, with an estimated 20 hours in the Bell 47.

When I got to PJC I preflighted the helicopter. I don't trust the gauge, so I dipped the tank and there was roughly 3/8th of a tank of fuel on preflight. The dipstick came with the helicopter. It is a wooden dowel with graduated lines etched into the wood. It appears to be a manufactured piece, but I don't know. I didn't like the fuel state, so I added some. Ron had fuel there in his hangar in red 5-gallon gas cans. Approximately 10.5 to 11 gallons was added to the helicopter. But that did not fill the tanks. After I put the 10 gallons it was between 5/8ths and 3/4ths of a tank.

The fuel capacity is 29 gallons and 28 is usable. Preflight, start, run-up, hover-taxi, takeoff all normal. Flew directly to Butler Farm Show and I needed a repeat endorsement so I could fly between 3G9 and PJC solo to continue my training. The training flight was .6 or .7 hours and then we shut down so Mr. Spiker could endorse my logbook. Prior to departure, I dipped the tank and the stick showed about 3/8ths to half a tank prior to departure back to PJC. We flew directly back, I dropped Mr. Spiker while the helicopter ran, and then departed for 3G9.

After takeoff, I picked up to a hover, taxied to runway 35 and climbed to 3-500 feet agl and turned directly to 3G9 and was about 3-4 miles from Zelienople I felt a sputter and drop in rpm and turned back to PJC, and power and rpm returned, flew about 2 miles when I lost power, set up for autorotation, grass field to my left, attempted off airport landing. I reach the field, I'm running out of rotor speed, lift, and rotor rpm. I was trying to reach the flat spot, did a 90-degree left turn and landed on the slope.

The performance and handling of the helicopter was fine, but it didn't seem to have the power that I remember. In comparison to the ferry flight, the performance I remember from 3-or 4 years ago was better.

Mr. Nickleach explained that the helicopter's last fuel service that filled the 28-gallon tank was September 25, 2021, in preparation for a ferry flight to PJC where an annual inspection would be performed on the helicopter. From the fuel service to landing at PJC, the helicopter logged approximately .5 hours on the hobbs meter. At the time the helicopter was received for maintenance, the hobbs meter showed 1616.5 hours. At the accident site, the hobbs showed 1618.3 hours.