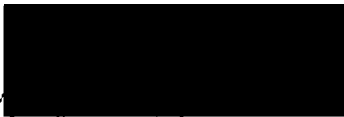
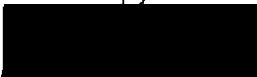


On January 29, 2018 at approximately 1730 hrs, I was flying on a training mission in the Spalding County Sheriff OH 58 helicopter with student pilot, Chief Deputy Tony Thomason. We had done four maneuvers where an engine quits above 500 feet AGL and ends in a power recovery between 200 feet to 100 feet AGL. This is a simulated engine failure with power recovery. In that 300 foot power off descent, the student pilot has to locate an area to put the aircraft down that would survive the landing. The pilot must plan to glide to the area, plan to land favorable to the winds, make a position call on radios, monitor gauges, especially rotor and engine gauges, determine if it is a real engine failure or instrument failure. Above all, fly the helicopter first. A fifth maneuver was initiated by me to show minimum rate of descent airspeed versus maximum glide airspeed. Around 200 feet recovery was started to complete the maneuver. On the main rotor RPM/N2 engine RPM tachometer, the needles were joined by rolling up the throttle, then the collective was raised and the helicopter gained altitude as we flew off. After 4 to 5 seconds there was a loss of power from the engine. A check was made that the throttle was fully open. Feeling no changes in the deceleration engine, I looked at the N2 engine RPM as I decreased collective to maintain main rotor RPM. The needles were split with the N2 engine RPM needle pointing down at approximately 70%. I decided to recycle the throttle from full open to idle detent and back to full open. Feeling no change or response in the engine, I told the student pilot, Thomason, "This is a real engine failure. Hold on." By then, the AC was put in a nose low attitude. We were at approximately 100 feet to 125 feet. Throttle was rolled to flight idle detent to prevent any engine surge on deceleration should the engine come to life. Around 20 feet to 15 feet deceleration with an aggressive flair was initiated to help recover main rotor RPMs which have decayed. Ground contact was smooth while leveling the skids. On ground run, the helicopter traveled over a 6-8 inch terrace. The tail boom was positioned up as we slid over the raised ground. The main rotor blades which had decelerated beyond any lift were drooping and struck the tail boom. There was only a measured 5 foot ground run after the contact with the tailboom and main rotor blades before the aircraft came to a stop. After aircraft stopped, there was odor of smoke. Fuel was cut off with pilot's throttle. Battery cut off. A check with each pilot showed no injury. Exit of aircraft was normal. Touchdown was smooth and would have been uneventful had ground run not been over the 6 to 8 inch terrace. No fire. Gray smoke was from the exhaust tubes. No damage to the landing area.

 Flight Instructor
 CFI