

During flight training with Les Daniel working on his complex endorsement we had an engine failure on final approach to Huntsville Executive Airport (KMDQ). The plan for the flight as we briefed was for airwork (slow flight, power on/off stalls, steep turns) in the Northeast Practice Area followed by closed traffic patterns at KMDQ. Les was in the left seat and I was in the right seat.

Approaching KMDQ from the Northeast, Les completed his descent checklist and descended from approximately 3000 feet to pattern altitude of 1800 feet. After entering the right downwind for runway 36 Les set the airplane up for landing with mixture full rich, propeller control full forward and manifold pressure set to approximately 18". The fuel pump was on and Les set the fuel selector switch to the right (fullest) tank. As we passed abeam our intended point of touchdown Les adjusted the manifold pressure to approximately 15", set the flaps to 10 degrees and then lowered the landing gear. Airspeed was approximately 110 mph. At approximately a 45-degree angle from his touchdown point, Les turned onto the base leg and then set the flaps to 25 degrees and adjusted airspeed to approximately 100 mph. As he approached his turn to final Les and I both commented that he was right on the glide path as indicated by the PAPI lights at the approach end of runway 36. Les turned onto final and set flaps to 40 degrees and airspeed to approximately 90 mph. Shortly after turning to final, the engine began to run rough and it sounded/felt like a cylinder was "missing". We both immediately recognized something was wrong and began to troubleshoot by confirming that the master switch was on, the fuel pump was on and the advanced the throttle to full. Within 10 seconds the engine quit, but the propeller continued to windmill.

At that point I took control and Les changed the fuel selector to the left tank hoping that the engine would restart. We could tell that we would not make it to the runway and would likely impact the ground near or on the airport fence or the small hill that climbs approximately 20 feet (measured on google earth) from the elevation of the field we landed in and the runway threshold. In order to land prior impacting the hillside, I conducted an S-turn and impacted the field just prior to a drainage ditch running from the northwest to the southeast through the field.

After the airplane came to a stop, we attempted to contact both Huntsville Executive Unicom and Huntsville International Approach Control prior to shutting the electrical equipment off. When we were unable to contact anyone via radio, we shut off all electrical equipment, set the fuel selector to off and proceeded to contact 911, Huntsville Executive crash rescue, Redstone Arsenal Flying Activity manager and maintenance director, Redstone Arsenal Flight Operations and Flight Service.