



# Aviation Investigation Final Report

---

<b>Location:</b>	Middletown, Ohio	<b>Accident Number:</b>	CEN13CA190
<b>Date &amp; Time:</b>	March 11, 2013, 22:00 Local	<b>Registration:</b>	N199Q
<b>Aircraft:</b>	Mooney M20E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	1 Serious, 1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

---

## Analysis

According to the pilot, during an approach to land, he attempted to activate the runway lights via the push-to-talk radio switch in the cockpit; however, the lights would not activate. While continuing to fly for about 2 hours attempting to locate another airport, the airplane ran out of fuel, and the pilot executed a forced landing. During the forced landing, the airplane impacted power lines and brush-covered terrain. The airplane sustained substantial damage to the fuselage and both wings. Examination of the airplane did not reveal any preaccident mechanical malfunctions or failures that would have precluded normal operation. During the flight, the pilot entered class C and class D airspace and instrument meteorological conditions without clearance. The pilot did not hold a current medical certificate or flight review, and the airplane's annual inspection was not current. The pilot admitted to emergency first responders that he had been consuming alcohol before the flight.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The total loss of engine power due to fuel exhaustion, which resulted from the noncurrent pilot's improper in-flight fuel management and decision-making and his decision to conduct the flight after consuming alcohol.

## Findings

---

<b>Aircraft</b>	Fuel - Fluid level
<b>Personnel issues</b>	Qualification/certification - Pilot
<b>Aircraft</b>	Scheduled maint checks - Not serviced/maintained
<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Personnel issues</b>	Alcohol - Pilot

## Factual Information

### History of Flight

<b>Maneuvering</b>	Fuel exhaustion (Defining event)
<b>Emergency descent</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	50, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3500 hours (Total, all aircraft), 40 hours (Total, this make and model), 12 hours (Last 90 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N199Q
<b>Model/Series:</b>	M20E	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1179
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-B1B
<b>Registered Owner:</b>	ON FILE	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	ON FILE	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Middletown, OH	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Middletown, OH	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	20:00 Local	<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 Minor	<b>Latitude, Longitude:</b>	39.531665,-84.396385(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Sauer, Aaron
<b>Additional Participating Persons:</b>	Gary L Middleton; Federal Aviation Administration; Cincinnati, OH
<b>Original Publish Date:</b>	June 24, 2013
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=86398">https://data.nts.gov/Docket?ProjectID=86398</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).