



# Aviation Investigation Final Report

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<b>Location:</b>	Pembroke Pines, Florida	<b>Accident Number:</b>	ERA12CA348
<b>Date &amp; Time:</b>	May 19, 2012, 12:20 Local	<b>Registration:</b>	N2610W
<b>Aircraft:</b>	Mooney M20C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel exhaustion	<b>Injuries:</b>	1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot reported that the airplane had flown about 4 hours, 25 minutes, including two takeoffs and climbs, since its last fueling. When the airplane was about 3 miles from the destination airport at 1,200 feet above ground level, the engine lost all power. The fuel selector was positioned to the left main fuel tank when the power loss occurred. The pilot moved the selector to the right main fuel tank, but the engine did not regain power. The pilot then performed a forced landing to a road. During the landing, he veered left to avoid an automobile and the left wing impacted a median. The airplane spun 180 degrees and came to rest upright. Postaccident examination of the wreckage revealed no evidence of mechanical malfunctions or failure that would have precluded normal operation; however, there was impact-related damage to both wings. The left main fuel tank was intact and did not contain any fuel. Although the top of the right main fuel tank had been compromised, there was no evidence that fuel had leaked from that tank. About 1/2 gallon of fuel was found in the right main fuel tank.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel management, which resulted in a total loss of engine power during approach due to fuel exhaustion.

## Findings

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**Personnel issues**

Fuel planning - Pilot

**Aircraft**

Fuel - Fluid management

## Factual Information

### History of Flight

<b>Approach-VFR pattern downwind</b>	Fuel exhaustion (Defining event)
<b>Approach-VFR pattern downwind</b>	Loss of engine power (total)
<b>Emergency descent</b>	Off-field or emergency landing
<b>Emergency descent</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-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>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	March 23, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 24, 2010
<b>Flight Time:</b>	4000 hours (Total, all aircraft), 200 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N2610W
<b>Model/Series:</b>	M20C	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3290
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 18, 2012 Annual	<b>Certified Max Gross Wt.:</b>	2575 lbs
<b>Time Since Last Inspection:</b>	5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2904 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, aided in locating accident	<b>Engine Model/Series:</b>	O-360
<b>Registered Owner:</b>	MCCONNELL WILLIAM R	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	MCCONNELL WILLIAM R	<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>	Day
<b>Observation Facility, Elevation:</b>	HWO,8 ft msl	<b>Distance from Accident Site:</b>	3 Nautical Miles
<b>Observation Time:</b>	11:53 Local	<b>Direction from Accident Site:</b>	180°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 3000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	4 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.95 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Athens, GA (AHN)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Pembroke Pines, FL (HWO)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	08:10 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	North Perry Airport HWO	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	8 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<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 Minor, 1 None	<b>Latitude, Longitude:</b>	26.001111,-80.240554(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gretz, Robert
<b>Additional Participating Persons:</b>	Frank Donovan; FAA/FSDO; Miramar, FL
<b>Original Publish Date:</b>	October 15, 2012
<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=83709">https://data.nts.gov/Docket?ProjectID=83709</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.

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