



# Aviation Investigation Final Report

<b>Location:</b>	Bolingbrook, Illinois	<b>Accident Number:</b>	CHI08CA283
<b>Date &amp; Time:</b>	September 17, 2008, 10:05 Local	<b>Registration:</b>	N5651Q
<b>Aircraft:</b>	Mooney M20C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Fuel starvation	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that he performed a "runup" and switched the fuel tank selector to the fullest tank prior to takeoff on a cross-country flight. During takeoff the pilot retracted the landing gear, climbed to about 300 feet above ground level, and then encountered a loss of engine power. He stated that he banked left to avoid housing and landed the airplane at an intersection with stopped traffic. An airframe and powerplant mechanic that assisted the first responders stated that he found the fuel selector switch in the four o'clock position between the three o'clock right hand tank position and the six o'clock off position. An on-scene examination of the airplane revealed no other preimpact anomalies.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The non-mechanical loss of engine power due to the pilot's incorrect positioning of the fuel tank selector prior to takeoff and the subsequent fuel starvation during takeoff.

## Findings

<b>Aircraft</b>	Fuel selector/shutoff valve - Incorrect use/operation
<b>Personnel issues</b>	Use of equip/system - Pilot

## Factual Information

### History of Flight

<b>Prior to flight</b>	Miscellaneous/other
<b>Takeoff</b>	Fuel starvation (Defining event)
<b>Takeoff</b>	Loss of engine power (total)
<b>Emergency descent</b>	Off-field or emergency landing

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	62, 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>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	April 1, 2008
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 1, 2007
<b>Flight Time:</b>	975 hours (Total, all aircraft), 800 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N5651Q
<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>	3019
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	July 1, 2008 Annual	<b>Certified Max Gross Wt.:</b>	2575 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3797.69 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-360-A1D
<b>Registered Owner:</b>	Thomas Bellm	<b>Rated Power:</b>	180 Horsepower
<b>Operator:</b>	Thomas Bellm	<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>		<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>	Morris, IL (1C5)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Morris, IL (C09)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	CLOW INTL 1C5	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	670 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 Minor	<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>	2 Minor	<b>Latitude, Longitude:</b>	41.695835,-88.129165(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Malinowski, Edward
<b>Additional Participating Persons:</b>	Kevin Raymond; Federal Aviation Administration; West Chicago, IL
<b>Original Publish Date:</b>	January 22, 2009
<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=68990">https://data.nts.gov/Docket?ProjectID=68990</a>

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