



Aviation Investigation Final Report

Location: Wichita, Kansas **Accident Number: CEN16LA129**

Date & Time: March 18, 2016, 15:25 Local Registration: N9262M

Aircraft: Mooney M20C Aircraft Damage: Substantial

Defining Event: Loss of engine power (total) Injuries: 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The private pilot reported that he conducted a preflight inspection of the airplane and noted that both fuel tanks were full. The pilot then took off for the personal cross-country flight. During approach to landing at the destination airport, the pilot extended the downwind leg due to inbound instrument flight rules traffic. The engine then suddenly lost power, and the pilot conducted a forced landing.

An examination of the wreckage revealed no preimpact mechanical anomalies. The fuel tank selector was positioned to the left fuel tank, and the electric fuel pump was in the "off" position. No fuel was found in the left tank. There was no smell of fuel, no evidence of fuel spillage, and the fuel tank did not appear to have been breached. Some fuel, about 2 to 3 inches deep, was found in the right fuel tank. If the pilot had switched the fuel selector from the left to the right fuel tank and turned on the electric fuel pump, the engine would not have been starved of fuel.

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 starvation, which resulted from the pilot's improper fuel management.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Use of equip/system - Pilot

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Factual Information

History of Flight

Approach-VFR pattern downwind

Loss of engine power (total) (Defining event)

Emergency descent Off-field or emergency landing

Landing Collision with terr/obj (non-CFIT)

On March 18, 2016, about 1525 central daylight time, a Mooney M20C, N9262M, lost engine power while on approach to the Col. James Jabara Airport (AAO), Wichita, Kansas, and subsequently collided with terrain. The pilot and his passenger received minor injuries. The airplane was substantially damaged. The airplane was registered to and operated by the Sabris Corporation, Wichita, Kansas, under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed at the time of the accident, and no flight plan had been filed. The flight originated from Dickson (M02), Tennessee, about 1130 was en route to AAO.

According to the pilot's statement, he had preflighted the airplane in M02 and noted that both fuel tanks were "filled to the rim." (According to the Mooney Aircraft Corporation, fuel capacity for the model M20C is 52 gallons, 26 gallons per wing tank). The flight to AAO was uneventful. Due to inbound IFR (instrument flight rules) traffic, the pilot extended the downwind leg for landing when the engine suddenly lost power. The pilot said he used the ALARMS (airspeed, landing site, air restart, radios, mayday, secure plane) checklist. The airplane was too far from the runway, so the pilot attempted to land on a golf course. He did not recall the forced landing and woke up in an ambulance en route to the hospital.

A Federal Aviation Administration inspector who examined the airplane reported finding "no discernible quantity of fuel in the left tank." The fuel selector was positioned on the left fuel tank, and the electric fuel pump was in the off position. When the airplane was placed in a level position, the inspector was not able to sump fuel from the left fuel tank, even with the electric fuel pump running, or from the fuel selector valve sump. Some fuel was noted in the right fuel tank. The inspector was able to sump fuel from the right fuel tank. The fuel level was about 2 to 3 inches in depth. There was no evidence of fuel spillage, and the fuel tanks did not appear to have been breached. There were no fuel stains on the ground or the smell of fuel around the airplane. No other anomalies or mechanical failures were noted.

Airplane damage consisted of a buckled lower fuselage from the engine cowling aft to the rear bulkhead. The firewall was bent. The right wing leading edge bore crush damage, and the main landing gear was pushed up through the wing. The flap was also bent.

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Pilot Information

Certificate:	Private	Age:	17,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	June 14, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 31, 2015
Flight Time:	(Estimated) 123 hours (Total, all aird	craft), 17 hours (Total, this make and r	model)

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N9262M
Model/Series:	M20C	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3456
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	2575 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	C91 installed	Engine Model/Series:	O-360-A1D
Registered Owner:	Sabris Corp.	Rated Power:	180 Horsepower
Operator:	Sabris Corp.	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Airport Information

Airport:	Colonel James Jabara KAAO	Runway Surface Type:	
Airport Elevation:	1421 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	37.726665,-97.228614(est)

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Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Chad D Landes; FAA Flight Standards District Office; Wichita, KS
Original Publish Date:	August 16, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=92869
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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.

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