



Aviation Investigation Final Report

Location:	Hooker, Oklahoma	Accident Number:	CEN12LA368
Date & Time:	June 12, 2012, 15:20 Local	Registration:	N6455Q
Aircraft:	Mooney M20F	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during the initial climb, a sudden partial loss of engine power occurred. The pilot lost airplane control as the airplane drifted left and then stalled. The airplane impacted terrain near the runway departure end. A significant fuel spill occurred, but no postimpact fire ensued. A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

Postaccident toxicology testing of the pilot's blood and urine specimens, which were obtained about 4 hours after the accident, revealed the presence of amphetamine and methamphetamine at levels consistent with recreational drug use shortly before the accident flight. Given the levels of methamphetamine and amphetamine in his blood 4 hours after the accident, it is likely that the pilot's judgment and ability to respond to an urgent or emergency situation was significantly impaired and contributed to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's loss of airplane control after a partial loss of engine power for reasons that could not be determined because postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures, which resulted in an aerodynamic stall. Contributing to the accident was the pilot's impairment as a result of his recent use of illicit drugs.

Findings

Aircraft	Airspeed - Not attained/maintained
Personnel issues	Illicit drug - Pilot
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Initial climb	Loss of engine power (partial) (Defining event)
Emergency descent	Aerodynamic stall/spin
Uncontrolled descent	Collision with terr/obj (non-CFIT)
Post-impact	Part(s) separation from AC
Post-impact	Hazardous material leak/spill
Post-impact	Cabin safety event

On June 12, 2012, about 1520 central daylight time, a Mooney M20F, N6455Q, was substantially damaged when it impacted terrain during initial climb after take-off from Hooker Municipal Airport (O45), Hooker, Oklahoma. The private pilot and the non-pilot passenger were seriously injured. The airplane was registered to West Coast Properties, LLC; Cheyenne, Wyoming, and was operated the pilot under the provisions of 14 Code of Federal Regulations Part 91, as personal flight. Day visual meteorological conditions prevailed and no flight plan was filed. At the time of the accident the airplane was departing O45 for a flight to an unknown airport near Minneapolis, Minnesota.

The pilot reported that the airplane was in initial climb when there was a sudden partial loss of power. The pilot then retracted the landing gear and control was lost as the airplane began drifting to the left and stalled. The airplane impacted in a nose-down attitude on the nose and both wing tips and came to rest upright in an agricultural field about 900 feet southeast of the runway departure end. There was a significant fuel spill but no postimpact fire. A postaccident examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

Routine postaccident toxicology testing was performed by the toxicology laboratory at the Federal Aviation Administration (FAA) Civil Aerospace Medical Institute. The pilot's blood specimen obtained about four hours after the accident was found to contain amphetamine (0.11 ug/ml) and methamphetamine (0.787 ug/ml). Specimens of the pilot's urine obtained about four hours after the accident contained amphetamine (15.708 ug/ml) and methamphetamine (133.847 ug/ml), and in addition contained ephedrine, fentanyl, morphine, ondansetron, phenylpropanolamine, and pseudoephedrine. Methamphetamine is a Schedule II controlled substance and is used medically to treat attention deficit disorder, with or without hyperactivity, and narcolepsy. It is also a drug of abuse with street names crystal meth, crank, and ice. Amphetamine is the primary active metabolite of methamphetamine. Ephedrine, pseudoephedrine and phenylpropanolamine are each over the counter treatments for nasal congestion and appetite suppression but there is no single preparation that contains all three. However, each is used as a main ingredient in the illegal production of methamphetamine and may contaminate the street drug. Fentanyl and morphine are opioid analgesics and ondansetron is an anti-emetic; these had been administered at the hospital which initially provided postaccident care.

At 1515, the automated weather reporting station at Liberal Mid-America Regional Airport (KLBL), Liberal, Kansas, located 17 miles northeast from the accident site, reported wind from 140 degrees at 24 knots with gusts to 32 knots, visibility of 10 miles or greater, sky clear, temperature 30 degrees Celsius (C), dew point temperature 9 degrees C, and an altimeter setting 30.10 inches of Mercury.

Pilot Information

Certificate:	Private	Age:	55
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 5, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 6, 2010
Flight Time:	(Estimated) 652 hours (Total, all aircraft)		

Passenger Information

Certificate:		Age:	34
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Mooney	Registration:	N6455Q
Model/Series:	M20F	Aircraft Category:	Airplane
Year of Manufacture:	1967	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	670438
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	February 5, 2012 Unknown	Certified Max Gross Wt.:	2740 lbs
Time Since Last Inspection:	34 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4196 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360-A1A
Registered Owner:	On file	Rated Power:	200 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KLBL, 2885 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	15:15 Local	Direction from Accident Site:	39°
Lowest Cloud Condition:	Clear	Visibility:	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	24 knots / 32 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	30°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hooker, OK (O45)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:20 Local	Type of Airspace:	Class G

Airport Information

Airport:	Hooker Municipal Airport O45	Runway Surface Type:	Asphalt
Airport Elevation:	2998 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3311 ft / 60 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	36.850276,-101.221664(est)

Administrative Information

Investigator In Charge (IIC):	Latson, Thomas
Additional Participating Persons:	Daniel Vengen; FAA Lubbock FSDO; Lubbock, TX
Original Publish Date:	November 13, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=83955

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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](#).