



# Aviation Investigation Factual Report

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<b>Location:</b>	Nacogdoches, Texas	<b>Accident Number:</b>	DFW07LA017
<b>Date &amp; Time:</b>	October 30, 2006, 16:30 Local	<b>Registration:</b>	N2591W
<b>Aircraft:</b>	Mooney M20E	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Factual Information

On October 30, 2006, approximately 1630 central standard time, a single-engine Mooney M20E airplane, N2591W, was substantially damaged during a forced landing following a loss of engine power shortly after takeoff from the A L Mangham Jr. Regional Airport (OCH), near Nacogdoches, Texas. The private pilot and passenger were not injured. The airplane was registered to and operated by a private individual. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight.

The 849-hour private pilot reported in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) that he completed his preflight inspection, which consisted of checking the oil, fuel, and control surfaces. After starting the engine, he went through his normal checks; "oil pressure, volts, fuel pressure, and avionics." He then taxied the airplane to Runway 18, where he completed the engine run-up. The pilot reported that the engine gauges were "normal" as he elected to depart. After reaching an altitude of approximately 300 feet, "the engine lost power," and the pilot chose to land in a grassy area between runways 18 and 15. Additionally, the pilot reported the time between engine start and takeoff was about 15 minutes.

A Federal Aviation Administration (FAA) inspector, who examined the airplane at the accident site, reported that fuel was present in the fuel tanks and that the airplane sustained structural damage during the forced landing.

An engine run was conducted on January 23, 2007 under the supervision of the NTSB Investigator-In-Charge. The engine, which was separated from the airframe for transport to the salvage yard, was placed on an engine test stand. The propeller, which sustained impact damage during the forced landing, was replaced with a test propeller. The engine was then started and run for approximately 10 minutes at various power settings.

The reason for the reported loss of engine power could not be determined.

At 1553, the automated weather observation system at LFK, approximately 20 miles south of the accident site, reported winds from 160 degrees at 11 knots, 10 miles visibility, a clear sky, temperature 77 degrees Fahrenheit, dew point 61 degrees Fahrenheit, and an altimeter setting of 29.87 inches of Mercury.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	49, 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>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	December 1, 2005
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	October 1, 2005
<b>Flight Time:</b>	849 hours (Total, all aircraft), 700 hours (Total, this make and model), 760 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Mooney	<b>Registration:</b>	N2591W
<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>	944
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	April 1, 2006 Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5864 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200 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>	Day
<b>Observation Facility, Elevation:</b>	KLFK	<b>Distance from Accident Site:</b>	20 Nautical Miles
<b>Observation Time:</b>	15:53 Local	<b>Direction from Accident Site:</b>	180°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots / None	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	160°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.87 inches Hg	<b>Temperature/Dew Point:</b>	25°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Nacogdoches, TX (OCH)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Nacogdoches, TX	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	A L MANGHAM JR. REGIONAL OCH	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	355 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5000 ft / 75 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	31.577777,-94.708335

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hatch, Craig
<b>Additional Participating Persons:</b>	Richard Payton; FAA, FSDO; San Antonio, TX
<b>Report Date:</b>	January 30, 2007
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=64788">https://data.nts.gov/Docket?ProjectID=64788</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](#).