



Aviation Investigation Final Report

Location: Moody, Texas Accident Number: CEN13LA097

Date & Time: December 8, 2012, 15:30 Local Registration: N280JM

Aircraft: North American T-28C Aircraft Damage: Substantial

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

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that, while on a base leg to practice a low approach, the engine suddenly lost total power. The pilot executed an off-airport forced landing, which resulted in substantial damage to the engine mount, lower forward fuselage, and the wing spar. A postimpact fire immediately ensued in the engine compartment, which was quickly extinguished with handheld fire extinguishers. An adequate amount of fuel was found on board. An examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

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 for reasons that could not be determined because the examination of the engine did not reveal any anomalies that would have precluded normal operation.

Findings

Not determined (general) - Unknown/Not determined

Factual Information

History of Flight

Approach-VFR pattern base Loss of engine power (total) (Defining event)

Approach-VFR pattern base Off-field or emergency landing

Emergency descent Collision with terr/obj (non-CFIT)

Post-impact Fire/smoke (post-impact)

On December 8, 2012, about 1530 central standard time, a North American T-28C, single engine airplane, N280JM, was substantially damaged when it impacted terrain during an off airport forced landing near Charping Airport (5TA1), Moody, Texas. The airplane was registered to and operated by a private individual. The pilot and passenger sustained minor injuries. Visual meteorological conditions prevailed and a flight plan had been not filed for the 14 Code of Federal Regulations Part 91 personal flight. The airplane had departed from Draughon-Miller Central Texas Regional Airport (TPL), Temple, Texas, about 1400 for the local flight.

The pilot reported that he was on a base leg for a practice low approach to the 2,200 foot long turf runway at 5TA1, when there was a sudden complete loss of engine power. The pilot's brief efforts to restart the engine were unsuccessful and he executed an off-airport forced landing with the landing gear retracted and the speed brakes stowed. There was an immediate postimpact fire in the engine compartment which was extinguished with handheld fire extinguishers brought by several witnesses who had responded quickly.

A postaccident examination showed the engine mount, lower forward fuselage, and wing spar sustained substantial damage. There was fire damage to the engine compartment and the upper engine cowling and smoke damage to the cockpit area. There was adequate fuel on board. The supercharger had been tested before departure on both low and high with no deficiency noted. Both magnetos and the engine driven fuel pump and electric fuel boost pump had also been tested with no deficiency noted. The examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

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Pilot Information

Certificate:	Private	Age:	49
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	September 28, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 27, 2012
Flight Time:	(Estimated) 4089 hours (Total, all aircraft), 22 hours (Total, this make and model), 3900 hours (Pilot In Command, all aircraft), 69 hours (Last 90 days, all aircraft), 39 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	North American	Registration:	N280JM
Model/Series:	T-28C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	226-166
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	July 13, 2012 Annual	Certified Max Gross Wt.:	8500 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4049 Hrs at time of accident	Engine Manufacturer:	WRIGHT
ELT:	C91A installed, activated, did not aid in locating accident	Engine Model/Series:	R-1820-86B
Registered Owner:	On file	Rated Power:	1475 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTPL,682 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	15:55 Local	Direction from Accident Site:	170°
Lowest Cloud Condition:	Few / 2900 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.79 inches Hg	Temperature/Dew Point:	24°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Temple, TX (TPL)	Type of Flight Plan Filed:	None
Destination:	Temple, TX (TPL)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	CHARPING 5TA1	Runway Surface Type:	Grass/turf
Airport Elevation:	683 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	2200 ft / 60 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	31.190555,-97.407218(est)

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Administrative Information

Investigator In Charge (IIC):	Latson, Thomas
Additional Participating Persons:	Brian F Fricker; FAA San Antonio FSDO; San Antonio, TX
Original Publish Date:	February 4, 2015
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=85790

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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