



Aviation Investigation Final Report

Location:	Luling, Texas	Accident Number:	CEN18LA163
Date & Time:	May 8, 2018, 15:00 Local	Registration:	N3291U
Aircraft:	Cessna 182F	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	3 Minor, 2 None
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

Before taking off for the skydiving flight with four passengers, the commercial pilot refueled the airplane. Shortly after the airplane rotated, the passengers told the pilot that fuel was leaking from the left wing. The pilot believed that the leak was an immediate fire risk, so he decided to perform an off-airport landing. The pilot abruptly lowered the airplane's nose and landed in a field. The airplane impacted terrain in a left-wing-low attitude and then hit a berm. The engine and right main landing gear separated during the impact sequence, and the left and right wings sustained substantial damage.

Postaccident examination revealed that the left-wing fuel tank cap was not secured and was dangling by the chain. During examination, no issues or anomalies with the left-wing fuel cap or fuel tank filler inlet were found, and the fuel cap was able to be fully secured. An examination of the airframe, engine, and remaining systems revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation. Given the evidence, it is likely that the pilot did not secure the left-wing fuel cap after refueling the airplane.

The airport was less than 1 mile away when the passengers told the pilot about the leak. It is possible that the pilot could have returned to the airport and landed the airplane at the airport without further incident.

Probable Cause and Findings

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

The pilot's failure to secure the left-wing fuel cap after refueling the airplane, which resulted in a fuel leak on takeoff.

Findings

Aircraft	(general) - Incorrect use/operation
Personnel issues	Forgotten action/omission - Pilot
Personnel issues	Use of equip/system - Pilot
Environmental issues	Sloped/uneven terrain - Contributed to outcome

Factual Information

History of Flight

Prior to flight	Aircraft servicing event
Initial climb	Hazardous material leak/spill
Landing	Off-field or emergency landing
Landing	Collision during takeoff/land (Defining event)
Landing	Part(s) separation from AC

On May 8, 2018, about 1500 central daylight time, a Cessna 182F airplane, N3291U, impacted a field 0.3 miles southeast of the airport shortly after takeoff from The Carter Memorial Airport (T91), Luling, Texas. The commercial pilot and 2 passengers sustained minor injuries, and 2 passengers were not injured. The airplane sustained substantial damage. The skydiving flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no Federal Aviation Administration (FAA) flight plan had been filed for the flight. The local flight was originating at the time of the accident.

According to statements from the pilot and the passengers, shortly after the airplane rotated, the passengers noticed that fuel was leaking from the left wing. The passengers brought it to the attention of the pilot. The pilot perceived the leak as an immediate fire risk and felt it was necessary to perform an off-airport landing. The pilot abruptly lowered the nose of the airplane and landed in a field.

According to the FAA inspector who responded to the accident, during the forced landing to the field the airplane hit the ground in a left-wing low attitude and then hit a berm. The airplane came to rest in a field to the southeast of the departure end of runway 17. The engine and the right main landing gear separated during the impact sequence. Both the left and right wings were substantially damaged. The left-wing fuel tank cap was dangling by the chain and was not secured. There were no issues or anomalies with the left fuel cap or left-wing fuel tank filler inlet and the left fuel cap was able to be securely installed at the time of the examination. An examination of the airframe, engine, and remaining systems revealed no anomalies that would have precluded normal operations.

The pilot had fueled the airplane before the accident flight.

Pilot Information

Certificate:	Commercial	Age:	26
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	October 13, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	325 hours (Total, all aircraft), 34 hours (Total, this make and model), 259 hours (Pilot In Command, all aircraft), 61 hours (Last 90 days, all aircraft), 31 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N3291U
Model/Series:	182F F	Aircraft Category:	Airplane
Year of Manufacture:	1963	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	18254691
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	December 18, 2017 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5622 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-470-D
Registered Owner:	On file	Rated Power:	0 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:	KHYI,594 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	20:15 Local	Direction from Accident Site:	314°
Lowest Cloud Condition:	Scattered / 200 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	11 knots / None	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	32°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Luling, TX (T91)	Type of Flight Plan Filed:	None
Destination:	Luling, TX (T91)	Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	The Carter Memorial Airport T91	Runway Surface Type:	
Airport Elevation:	475 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	2 Minor, 2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor, 2 None	Latitude, Longitude:	29.723611,-97.659164(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Jeffrey Hamilton; Federal Aviation Administration; San Antonio, TX
Original Publish Date:	April 30, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97215

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](#).