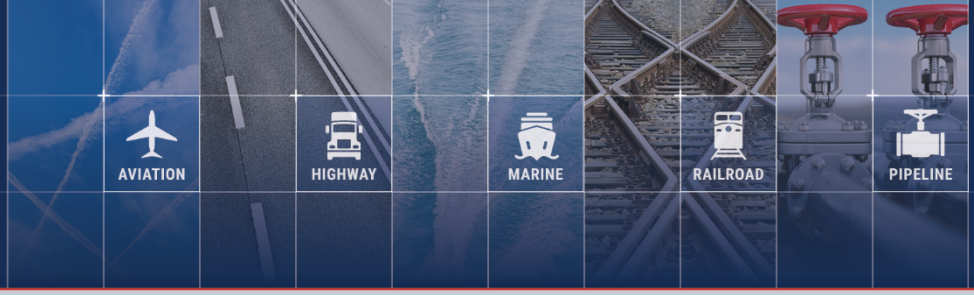

Aviation Investigation Final Report

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