



Aviation Investigation Final Report

Location:	Homosassa, Florida	Accident Number:	GAA19CA070
Date & Time:	November 8, 2018, 10:00 Local	Registration:	N1ZR
Aircraft:	Cessna T337	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, 2 days before the accident flight, the multiengine airplane's fuel tanks were filled (150 gallons). During the taxi to the runway, the right main tire blew. During recovery, the right side of the airplane was placed on a dolly to support the gear so that the airplane could be towed. The pilot reported that, due to the airplane's fuel system design, when one side of the airplane was raised, all the fuel could be transferred to the opposite tank, which then forced the fuel to be released out of the air vent line.

On the day of the accident, the pilot completed his preflight inspection and visually confirmed the fuel quantity by checking both fuel gauges, which were "green"; however, he did not verify the fuel onboard by checking the tanks. About 3 hours into the flight, the rear engine lost power. Before the pilot attempted to restart the rear engine and after he verified the correct engine to feather, the front engine also lost power. When the pilot realized the airplane would be unable to reach the nearest airport, he landed it in a grass marsh with the landing gear retracted. During the landing, the airplane's wing hit grass and then veered right about 90°, which caused the left wing to dip and impact terrain.

The airplane sustained substantial damage to the left aileron and empennage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

During his preflight inspection, the pilot should have verified the fuel quantity in the fuel tanks to ensure there was sufficient fuel onboard for the flight, and his failure to do so led to fuel exhaustion and the subsequent total loss of power in both engines.

Probable Cause and Findings

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

The pilot's inadequate preflight inspection, which resulted in fuel exhaustion and the subsequent total loss of power in both engines.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot

Factual Information

History of Flight

Prior to flight	Aircraft servicing event
Enroute	Fuel exhaustion (Defining event)
Enroute	Loss of engine power (total)
Landing	Off-field or emergency landing
Landing	Landing gear not configured
Landing	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	55, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 8, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 11, 2018
Flight Time:	(Estimated) 1293 hours (Total, all aircraft), 51 hours (Total, this make and model), 51 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1ZR
Model/Series:	T337 G	Aircraft Category:	Airplane
Year of Manufacture:	1977	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	P3370275
Landing Gear Type:	Retractable - Tricycle	Seats:	
Date/Type of Last Inspection:	August 21, 2018 100 hour	Certified Max Gross Wt.:	4700 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	1879.8 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C91A installed, activated, aided in locating accident	Engine Model/Series:	TSIO-520-NB16
Registered Owner:	On file	Rated Power:	
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:	KCGC, 10 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	10:15 Local	Direction from Accident Site:	32°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	18°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Memphis, TN (MEM)	Type of Flight Plan Filed:	IFR
Destination:	Brooksville, FL (BKV)	Type of Clearance:	Unknown
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	28.753334,-82.647224(est)

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Scott Olson; FAA; Tampa, FL
Original Publish Date:	June 10, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98666

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](#).