



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| 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

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| Aircraft | Fuel - Fluid level |
| Personnel issues | Fuel planning - Pilot |

Factual Information

History of Flight

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|------------------------|------------------------------------|
| 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

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|----------------------------------|--|--|--------------------|
| 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

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|--------------------------------------|---|---------------------------------------|-----------------|
| 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: | | Rated Power: | |
| Operator: | On file | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|------------------|
| 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

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|----------------------------|--------|---------------------------------|---------------------------|
| 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

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| Investigator In Charge (IIC): | Swenson, Eric |
| Additional Participating Persons: | Scott Olson; FAA; Tampa, FL |
| Original Publish Date: | June 10, 2019 |
| 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), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).