



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Alamo, TX | Accident Number: | CEN16LA207 |
| Date & Time: | 06/03/2016, 1030 CDT | Registration: | N418DS |
| Aircraft: | SMITH Capella FW2R | Aircraft Damage: | Substantial |
| Defining Event: | Fuel exhaustion | Injuries: | 1 Minor |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

The pilot reported that the purpose of the flight was to use most of the fuel remaining in the fuel tanks so that he could store the airplane over the summer. While returning to the airport, the engine experienced a total loss of power. During the subsequent forced landing to a small field, the airplane hit a tree, resulting in substantial damage. The pilot stated that when the airplane was recovered, both fuel tanks were empty.

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 due to fuel exhaustion, which resulted in a forced landing and a collision with a tree.

Findings

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| Aircraft | Fuel - Fluid level (Cause) |
| Personnel issues | Fuel planning - Pilot (Cause) |
| Environmental issues | Tree(s) - Contributed to outcome |

Factual Information

On June 3, 2016, about 1030 central daylight time, a Smith Capella Aircraft FW2R/XLS airplane, N418DS, was substantially damaged during a forced landing near Alamo, Texas. The commercial pilot had minor injuries. The airplane was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed at the time of the accident. The local flight departed McAllen Miller International Airport (MFE), McAllen, Texas, about 0900, and was returning to MFE at the time of the accident.

According to the pilot, the purpose of the flight was to use most of the fuel in the airplane, as he was going to park the airplane over the summer. In the past the automotive gasoline had "gummed up" his system sitting in the heat over the summer.

The pilot flew to South Texas International Airport (EBG), Edinburg, Texas, landed, called his wife, departed and conducted a touch and go landing, and then returned to MFE. EBG was 17 miles north of MFE. The airplane was at 2,500 feet above ground level and about 8 miles from the airport when the engine lost power. The pilot continued to fly the airplane towards the airport looking for a place to land while attempting to restore engine power. As he approached the airport his options diminished and during the forced landing to a small field the airplane hit a tree resulting in substantial damage to the wings and fuselage of the airplane.

The pilot stated that when the airplane was recovered, both fuel tanks were empty. He stated that he was confident that he just ran out of fuel resulting in the loss of engine power.

History of Flight

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| Enroute | Fuel exhaustion (Defining event) Loss of engine power (total) |
| Emergency descent | Off-field or emergency landing |
| Enroute | Controlled flight into terr/obj (CFIT) |

Pilot Information

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| Certificate: | Commercial | Age: | 98, Male |
| Airplane Rating(s): | Multi-engine Land; Multi-engine Sea; Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Sport Pilot None | Last Medical Exam: | |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | 05/04/2016 |
| Flight Time: | (Estimated) 13000 hours (Total, all aircraft), 300 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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| Aircraft Manufacturer: | SMITH Capella | Registration: | N418DS |
| Model/Series: | FW2R XLS | Aircraft Category: | Airplane |
| Year of Manufacture: | 1999 | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | DS4 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 11/14/2015, Conditional | Certified Max Gross Wt.: | 1270 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 296 Hours | Engine Manufacturer: | Rotax |
| ELT: | Installed, not activated | Engine Model/Series: | 912UL |
| Registered Owner: | On file | Rated Power: | 80 hp |
| Operator: | On file | Air Carrier Operating Certificate: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|-------------------------------------|-------------------|
| Observation Facility, Elevation: | KMFE, 107 ft msl | Observation Time: | 0953 CDT |
| Distance from Accident Site: | | Condition of Light: | Day |
| Direction from Accident Site: | | Conditions at Accident Site: | Visual Conditions |
| Lowest Cloud Condition: | Clear | Temperature/Dew Point: | 28° C / 22° C |
| Lowest Ceiling: | None | Visibility | 10 Miles |
| Wind Speed/Gusts, Direction: | Calm | Visibility (RVR): | |
| Altimeter Setting: | 29.89 inches Hg | Visibility (RVV): | |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | McAllen, TX (KMFE) | Type of Flight Plan Filed: | None |
| Destination: | McAllen, TX (KMPE) | Type of Clearance: | None |
| Departure Time: | 0900 CDT | Type of Airspace: | Class G |

Wreckage and Impact Information

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| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Minor | | |

Administrative Information

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| Investigator In Charge (IIC): | Jennifer Rodi | Adopted Date: | 10/06/2016 |
| Additional Participating Persons: | Brian F Fricker; FAA FSDO; San Antonio, TX | | |
| Publish Date: | 10/06/2016 | | |
| Note: | The NTSB did not travel to the scene of this accident. | | |
| Investigation Docket: | http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93314 | | |

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