



Aviation Investigation Final Report

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| Location: | Redding, California | Accident Number: | LAX08LA089 |
| Date & Time: | March 30, 2008, 14:30 Local | Registration: | N95ME |
| Aircraft: | Cessna 180K | Aircraft Damage: | Substantial |
| Defining Event: | Fuel starvation | Injuries: | 1 Serious |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot stated that, while maneuvering on downwind within the airport traffic pattern, he thought the fuel selector valve was on the "left" tank and rotated the handle 1/4 turn in the clockwise direction to a position he thought was "both." As the pilot turned onto base leg, he noticed the engine had lost power and initiated a forced landing to an area adjacent to the runway. Subsequently, the airplane landed hard on a rising embankment near the runway and came to rest upright. The fuselage and both wings were substantially damaged. The pilot reported that the fuel selector valve was actually in the "right" position, and when he rotated the fuel selector handle he had inadvertently positioned the valve to the "off" position. The pilot added that there were no mechanical anomalies with the engine or airframe prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel starvation as a result of the pilot's incorrect positioning of the fuel tank selector.

Findings

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| Aircraft | Fuel selector/shutoff valve - Incorrect use/operation |
| Personnel issues | Use of equip/system - Pilot |

Factual Information

History of Flight

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| Approach-VFR pattern base | Fuel starvation (Defining event) |
| Approach-VFR pattern base | Loss of engine power (total) |
| Emergency descent | Off-field or emergency landing |

On March 30, 2008, about 1430 Pacific daylight time, a Cessna 180K, N95ME, was substantially damaged during a forced landing following a loss of engine power while in the traffic pattern at the Benton Field Airport (O85), Redding, California. The airplane was registered to Tres Amigos Flying Club, LLC, and operated by the pilot under the provisions of Title 14 Code of Federal Regulations Part 91. The commercial pilot was seriously injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local flight. The personal flight originated from O85 about 5 minutes prior to the accident.

The pilot reported that after departure, he intended to remain within the airport traffic pattern to practice a series of landings. As the airplane was abeam the runway numbers for runway 33, the pilot extended 10 degrees of flaps and began configuring the airplane for landing. The pilot stated that he thought the fuel selector valve was on the "left" tank and rotated the handle 1/4 turn in the clockwise direction to a position he thought was "both." The pilot initiated a turn to base leg when he realized the airplane was slightly low and attempted to increase the engine power setting. He noticed that the engine had lost power and immediately retracted the flaps while initiating a forced landing to an area southwest of runway 33. Subsequently, the airplane landed hard on a rising embankment near the runway and came to rest upright.

The pilot added that the fuel selector valve was actually in the "right" position and when he rotated the fuel selector handle, he had inadvertently positioned the valve to the "off" position. The pilot stated that there were no mechanical anomalies with the engine or airframe prior to the accident.

Examination of the airplane by a Federal Aviation Administration inspector revealed that the fuselage and both wings sustained substantial damage.

Pilot Information

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| Certificate: | Commercial | Age: | 55, Male |
| Airplane Rating(s): | Single-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 With waivers/limitations | Last FAA Medical Exam: | January 2, 2008 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | June 14, 2006 |
| Flight Time: | 944 hours (Total, all aircraft), 104 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

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| Aircraft Make: | Cessna | Registration: | N95ME |
| Model/Series: | 180K | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 18052783 |
| Landing Gear Type: | Tailwheel | Seats: | 4 |
| Date/Type of Last Inspection: | August 1, 2007 Annual | Certified Max Gross Wt.: | 3190 lbs |
| Time Since Last Inspection: | 83 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 6883 Hrs at time of accident | Engine Manufacturer: | Continental |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-470-027 |
| Registered Owner: | TRES AMIGOS FLYING CLUB LLC | Rated Power: | 230 Horsepower |
| Operator: | Eric W. Marshall | 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: | RDD,505 ft msl | Distance from Accident Site: | 6 Nautical Miles |
| Observation Time: | 14:45 Local | Direction from Accident Site: | 127° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.98 inches Hg | Temperature/Dew Point: | 14°C / -11°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | REDDING, CA (O85) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 14:25 Local | Type of Airspace: | |

Airport Information

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| Airport: | Benton Field Airport O85 | Runway Surface Type: | Asphalt |
| Airport Elevation: | 719 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 33 | IFR Approach: | None |
| Runway Length/Width: | 2420 ft / 80 ft | VFR Approach/Landing: | Forced landing;Traffic pattern |

Wreckage and Impact Information

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| Crew Injuries: | 1 Serious | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Serious | Latitude, Longitude: | 40.571109,-122.404441 |

Administrative Information

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| Investigator In Charge (IIC): | Jones, Patrick |
| Additional Participating Persons: | Ken Meyer; Federal Aviation Administration; Sacramento, CA |
| Original Publish Date: | April 15, 2009 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=67778 |

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](#).