



Aviation Investigation Final Report

| Location: | Boise, Idaho | Accident Number: | WPR13LA111 |
|-------------------------|--|------------------|-------------|
| Date & Time: | February 2, 2013, 19:24 Local | Registration: | N8465L |
| Aircraft: | Cessna T210L | Aircraft Damage: | Substantial |
| Defining Event: | Abnormal runway contact | Injuries: | 2 Minor |
| Flight Conducted Under: | Part 91: General aviation - Other work use | | |

Analysis

The pilot had been with the company about 2 weeks, and a pilot-rated passenger was on board the airplane to instruct the pilot on the use of the equipment associated with aerial survey work. The pilot had not previously flown this make/model airplane, so the passenger was also facilitating the pilot's understanding of the airplane and its individual characteristics. The pilot completed about 3 hours of survey work and then proceeded to the airport for an instrument landing system approach. The pilot reported that, as the airplane neared the decision height, he observed lights on the ground, which he believed were part of the airport environment, so he continued the approach. When he subsequently determined that the approach was unstable, it was too late to execute a missed approach, and he landed the airplane short of the runway. The airplane sustained substantial damage to the fuselage. The pilot and passenger safely exited the airplane.

Probable Cause and Findings

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

The pilot's failure to maintain a proper glidepath and stabilized approach, which resulted in the airplane touching down short of the runway.

Findings

| Aircraft | Descent/approach/glide path - Not attained/maintained | |
|----------------------|---|--|
| Personnel issues | Incorrect action performance - Pilot | |
| Environmental issues | Runway/taxi/approach light - Effect on personnel | |

Factual Information

History of Flight

Landing-flare/touchdown

Abnormal runway contact (Defining event)

On February 2, 2013, about 1924 mountain standard time, a Cessna T210L, N8465L, collided with terrain at Boise Air Terminal, Boise, Idaho. Mat-Tech Engineering LLC was operating the airplane under the provisions of 14 Code of Federal Regulations (CFR) Part 91. The commercial pilot and one pilot-rated passenger sustained minor injuries; the airplane sustained substantial damage to the fuselage from impact forces. The cross-country aerial survey flight departed Twin Falls, Idaho, about 1530, with a planned destination of Boise. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan had been filed.

The pilot had been with the company about 2 weeks, and the passenger was on board to instruct the pilot on the use of the equipment associated with aerial survey work. The pilot had not flown this airplane so the passenger was also facilitating understanding of the airplane and its individual characteristics.

The pilot reported that the airplane had a full tank of fuel at departure, and the plan was to complete 3.5 hours of survey work; the work took about 3 hours. The pilot-rated passenger was to perform the radio calls. In addition to the automated terminal information system airport weather, the pilot asked approach control about the conditions at the airport. The pilot had apprehension about the weather, but proceeded to Boise for lack of a more suitable airport nearby that reported weather.

The pilot reported that he received an IFR clearance, and was on an instrument landing system approach to runway 10R. As he neared decision height, he observed a light, which he believed was part of the airport environment, so he continued the approach. However, when he determined that the approach was unstable, it was too late to execute a missed approach, and the landing was short of the runway. The pilot and passenger exited the airplane safely under their own power.

The pilot did not complete the National Transportation Safety Board Pilot/Operator Aircraft Accident/Incident Report Form 6120.1.

Pilot Information

| Certificate: | Commercial; Flight instructor | Age: | 33 |
|---------------------------|--|-----------------------------------|-------------------|
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane multi-engine; Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 1 Without waivers/limitations | Last FAA Medical Exam: | December 27, 2012 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | 1323 hours (Total, all aircraft), 27 hours (Total, this make and model), 33 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Cessna | Registration: | N8465L |
|----------------------------------|------------------------------------|-----------------------------------|-----------------|
| Model/Series: | T210L | Aircraft Category: | Airplane |
| Year of Manufacture: | 1975 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 21060635 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 10713 Hrs as of last inspection | Engine Manufacturer: | CONT MOTOR |
| ELT: | | Engine Model/Series: | TSIO-520 SER |
| Registered Owner: | MAR-TECH ENGINEERING LLC | Rated Power: | 300 Horsepower |
| Operator: | MAR-TECH ENGINEERING LLC | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Instrument (IMC) | Condition of Light: | Night/dark |
|---|-------------------------------|---|-------------|
| Observation Facility, Elevation: | KBOI,2871 ft msl | Distance from Accident Site: | |
| Observation Time: | 18:53 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | | Visibility | 0 miles |
| Lowest Ceiling: | Indefinite (V V) / 100 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 4 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 290° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.42 inches Hg | Temperature/Dew Point: | -1°C / -1°C |
| Precipitation and Obscuration: | Light - Freezing - Fog | | |
| Departure Point: | Twin Falls, ID (TWF) | Type of Flight Plan Filed: | IFR |
| Destination: | Boise, ID (BOI) | Type of Clearance: | IFR |
| Departure Time: | 16:20 Local | Type of Airspace: | |

Airport Information

| Airport: | Boise Air Terminal BOI | Runway Surface Type: | Asphalt |
|----------------------|------------------------|---------------------------|-----------|
| Airport Elevation: | 2871 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 10R | IFR Approach: | ILS |
| Runway Length/Width: | 9763 ft / 150 ft | VFR Approach/Landing: | Full stop |

Wreckage and Impact Information

| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
|------------------------|---------|-------------------------|----------------------------|
| Passenger Injuries: | 1 Minor | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Minor | Latitude, Longitude: | 43.564445,-116.222778(est) |

Administrative Information

| Investigator In Charge (IIC): | Plagens, Howard |
|--------------------------------------|--|
| Additional Participating Persons: | Bud L Carlson; FAA-FSDO; Boise, ID |
| Original Publish Date: | June 22, 2015 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | The NTSB did not travel to the scene of this accident. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=86125 |

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.