



Aviation Investigation Final Report

| Location: | Arctic Village, Alaska | Accident Number: | ANC14CA087 |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time: | September 19, 2014, 08:00 Local | Registration: | N333TB |
| Aircraft: | Helio H 250 | Aircraft Damage: | Substantial |
| Defining Event: | Loss of control in flight | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The pilot was departing from a remote, gravel-covered, 800-foot long off-airport site, in a tailwheel-equipped airplane. The pilot reported that at the time of the accident the airplane had been loaded at, or near the airplane's maximum gross weight limit. He said that shortly after the airplane became airborne, the tailwheel contacted an area of rising terrain causing the airplane to lose airspeed. The airplane subsequently collided with terrain at the departure end of the site, sustaining substantial damage to the fuselage and empennage. The pilot stated that there were no preaccident mechanical anomalies with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's selection of an unsuitable landing/takeoff area, resulting in an inflight collision with terrain during takeoff.

Findings

| Personnel issues | Decision making/judgment - Pilot |
|----------------------|---|
| Aircraft | Maximum weight - Not specified |
| Aircraft | Altitude - Not attained/maintained |
| Personnel issues | Monitoring environment - Pilot |
| Environmental issues | (general) - Awareness of condition |
| Environmental issues | (general) - Decision related to condition |

Factual Information

History of Flight

| Takeoff | Loss of control in flight (Defining event) |
|---------|--|
| Takeoff | Collision with terr/obj (non-CFIT) |

Pilot Information

| Certificate: | Private | Age: | 51 |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 4-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Without waivers/limitations | Last FAA Medical Exam: | January 13, 2014 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | May 12, 2012 |
| Flight Time: | 1570 hours (Total, all aircraft), 924 hours (Total, this make and model), 1503 hours (Pilot In Command, all aircraft), 48 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Helio | Registration: | N333TB |
|----------------------------------|--------------------------------|-----------------------------------|-----------------|
| Model/Series: | H 250 NO SERIES | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 2530 |
| Landing Gear Type: | Tailwheel | Seats: | 6 |
| Date/Type of Last Inspection: | June 23, 2014 Annual | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 6370 Hrs as of last inspection | Engine Manufacturer: | Lycoming |
| ELT: | C126 installed, activated | Engine Model/Series: | O-540-A1B5 |
| Registered Owner: | On file | Rated Power: | 250 Horsepower |
| 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: | PARC,2092 ft msl | Distance from Accident Site: | 74 Nautical Miles |
| Observation Time: | 15:56 Local | Direction from Accident Site: | 253° |
| Lowest Cloud Condition: | Thin Overcast / 2000 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | Overcast / 2000 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 7 knots / | Turbulence Type Forecast/Actual: | / Terrain-Induced |
| Wind Direction: | 50° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.36 inches Hg | Temperature/Dew Point: | 2°C / 1°C |
| Precipitation and Obscuration: | Light - None - Drizzle | | |
| Departure Point: | Arctic Village, AK | Type of Flight Plan Filed: | None |
| Destination: | CIRCLE, AK (CRC) | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | Class G |

Wreckage and Impact Information

| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 68.09082,-145.599624(est) |

Administrative Information

| Investigator In Charge (IIC): | Swick, Andrew |
|--------------------------------------|---|
| Additional Participating Persons: | |
| Original Publish Date: | December 5, 2014 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=90144 |

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.