



Aviation Investigation Final Report

| Location: | West Jordan, Utah | Accident Number: | DEN04LA090 |
|-------------------------|-------------------------------------------------|------------------|-------------|
| Date & Time: | June 14, 2004, 08:40 Local | Registration: | N8502F |
| Aircraft: | Aircraft Mfg & Dev. Co. (AMD) Aleros CH 2000 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | |

Analysis

The pilot was demonstrating his first series of solo take-offs and landings to, and was under the supervision of, his instructor. The first two takeoffs and landings were without incident. On the third landing, the airplane bounced and he aborted the landing. On the fourth landing attempt, the airplane was at low altitude and high airspeed. The airplane landed hard, crushing the nose gear aft. The propeller was bent and the firewall was buckled.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper flare which resulted in a hard landing. Contributing factors were the low altitude and high airspeed, resulting in an unstabilized approach.

Findings

Occurrence #1: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings 1. (F) ALTITUDE - LOW - PILOT IN COMMAND 2. (F) AIRSPEED - HIGH - PILOT IN COMMAND 3. (C) FLARE - IMPROPER - PILOT IN COMMAND Occurrence #2: NOSE GEAR COLLAPSED Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On June 14, 2004, approximately 0840 mountain daylight time, an Aircraft Manufacturing and Development Company Aleros CH 2000, N8502F, registered to and operated by Salt Lake Community College, was substantially damaged during a hard landing at Salt Lake City Municipal 2 Airport (U42), West Jordan, Utah. The student pilot, the sole occupant on board, was not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the local training flight being conducted under Title 14 CFR Part 91. The flight originated at Salt Lake City International Airport, Salt Lake City, Utah, approximately 0705.

According to his accident report, the pilot said he was demonstrating his first series of solo take-offs and landings to his instructor. The first two takeoffs and landings were without incident. On the third landing, the airplane bounced and he aborted the landing. On the fourth landing attempt, the airplane was at low altitude and high airspeed. The airplane landed hard, crushing the nose gear aft. The propeller was bent and the firewall was buckled.

| Certificate: | Student | Age: | 50,Male |
|---------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|------------------|
| Airplane Rating(s): | None | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | December 4, 2003 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 26 hours (Total, all aircraft), 26 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Pilot Information

Aircraft and Owner/Operator Information

| Aircraft Make: | Aircraft Mfg & Dev. Co. (AMD) | Registration: | N8502F |
|----------------------------------|-------------------------------|-----------------------------------|-----------------|
| Model/Series: | Aleros CH 2000 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Utility | Serial Number: | 20-1001 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | May 21, 2004 Annual | Certified Max Gross Wt.: | 1692 lbs |
| Time Since Last Inspection: | 11 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 1355 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Installed, not activated | Engine Model/Series: | 0-235-N2C |
| Registered Owner: | Salt Lake Community College | Rated Power: | 116 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|-----------------------------------------|----------------------------------|-----------------------------------------|-------------------|
| Observation Facility, Elevation: | SLC,4227 ft msl | Distance from Accident Site: | 10 Nautical Miles |
| Observation Time: | 08:56 Local | Direction from Accident Site: | 184° |
| Lowest Cloud Condition: | Few / 13000 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 8 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 320° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.02 inches Hg | Temperature/Dew Point: | 15°C / 8°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | West Jordan, UT (U42) | Type of Flight Plan Filed: | None |
| Destination: | West Jordan, UT (U42) | Type of Clearance: | None |
| Departure Time: | 07:05 Local | Type of Airspace: | Class C |

Airport Information

| Airport: | Salt Lake City Municipal 2 U42 | Runway Surface Type: | Asphalt |
|----------------------|--------------------------------|---------------------------|---------------------------|
| Airport Elevation: | 4603 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 16 | IFR Approach: | None |
| Runway Length/Width: | 5860 ft / 100 ft | VFR Approach/Landing: | Full stop;Traffic pattern |

Wreckage and Impact Information

| 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: | 40.619445,-111.992774 |

Administrative Information

| Investigator In Charge (IIC): | Scott, Arnold |
|--------------------------------------|-----------------------------------------------------------------------------|
| Additional Participating Persons: | James E Gilchrist; FAA Flight Standards District Office; Salt Lake City, UT |
| Original Publish Date: | September 29, 2004 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=59462 |

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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 <u>here</u>.