



National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Casper, WY | Accident Number: | GAA19CA394 |
| Date & Time: | 07/04/2019, 1430 MDT | Registration: | N941DM |
| Aircraft: | Merit Aviation Llc CCX-2000 | Aircraft Damage: | Substantial |
| Defining Event: | Loss of control on ground | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

The pilot of the tailwheel-equipped airplane reported that, during landing with a tailwind, the airplane ground looped to the right. Both landing gear collapsed, and the left wing struck the ground.

The airplane sustained substantial damage to the left wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The airport's automated weather observation station reported that, about 37 minutes before the accident, the wind was variable at 4 knots. The same automated station reported that, about 23 minutes after the accident, the wind was from 170° at 6 knots. The pilot landed the airplane on runway 03.

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 directional control during landing with a tailwind, which resulted in a ground loop.

Findings

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|----------------------|---|
| Aircraft | Directional control - Not attained/maintained (Cause) |
| Personnel issues | Aircraft control - Pilot (Cause) |
| Environmental issues | Tailwind - Effect on operation |

Factual Information

History of Flight

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|----------------|---|
| Landing | Loss of control on ground (Defining event) Landing gear collapse Collision with terr/obj (non-CFIT) |
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Pilot Information

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|----------------------------------|---|--|------------|
| Certificate: | Private | Age: | 60, Male |
| Airplane Rating(s): | Single-engine Land | Seat Occupied: | Front |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 With Waivers/Limitations | Last FAA Medical Exam: | 01/30/2019 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | 06/07/2019 |
| Flight Time: | (Estimated) 214 hours (Total, all aircraft), 21 hours (Total, this make and model), 144 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft) | | |

Co-Pilot Information

| | | | |
|----------------------------------|--|--|------------|
| Certificate: | Airline Transport | Age: | 60, Male |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land; Single-engine Sea | Seat Occupied: | Rear |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 2 With Waivers/Limitations | Last FAA Medical Exam: | 02/10/2019 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | 02/04/2019 |
| Flight Time: | (Estimated) 4000 hours (Total, all aircraft), 100 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|-------------------------------|---------------------------------------|------------------|
| Aircraft Make: | Merit Aviation Llc | Registration: | N941DM |
| Model/Series: | CCX-2000 | Aircraft Category: | Airplane |
| Year of Manufacture: | 2018 | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | CCX-2000-0036 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | 2000 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 100 Hours at time of accident | Engine Manufacturer: | Aero Sport Power |
| ELT: | Installed, not activated | Engine Model/Series: | CC363i |
| Registered Owner: | Merit Aviation Llc | Rated Power: | 180 hp |
| Operator: | Merit Aviation Llc | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|----------------------------------|---|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | KCPR, 5290 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1953 UTC | Direction from Accident Site: | 315° |
| Lowest Cloud Condition: | Clear | Visibility | 10 Miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 4 knots / | Turbulence Type Forecast/Actual: | None / None |
| Wind Direction: | Variable | Turbulence Severity Forecast/Actual: | N/A / N/A |
| Altimeter Setting: | 30.03 inches Hg | Temperature/Dew Point: | 25° C / 11° C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Hot Springs, SD (HSR) | Type of Flight Plan Filed: | None |
| Destination: | Casper, WY (CPR) | Type of Clearance: | VFR |
| Departure Time: | 1315 MDT | Type of Airspace: | Class D |

Airport Information

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|-----------------------------|----------------------------------|----------------------------------|-----------|
| Airport: | CASPER/NATRONA COUNTY INTL (CPR) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 5344 ft | Runway Surface Condition: | Dry |
| Runway Used: | 03 | IFR Approach: | None |
| Runway Length/Width: | 10165 ft / 150 ft | VFR Approach/Landing: | Full Stop |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|------------------------------|
| Crew Injuries: | 2 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 42.896111, -106.471389 (est) |

Administrative Information

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|--|---|---------------------|------------|
| Investigator In Charge (IIC): | Kathryn R Benhoff | Report Date: | 12/02/2019 |
| Additional Participating Persons: | Bruce J Hanson; FAA; Casper, WY | | |
| Publish Date: | 12/02/2019 | | |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. | | |
| Investigation Docket: | http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=99797 | | |

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).