



Aviation Investigation Final Report

Location: Culpeper, Virginia Accident Number: GAA18CA550

Date & Time: September 1, 2018, 12:00 Local Registration: N27WE

Aircraft: Boeing B75N1 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The pilot in the rear seat of the tailwheel-equipped biplane reported that he and another pilot were practicing landings on the asphalt runway. During the landing roll, the airplane entered a left ground-loop, and the bottom right wing and aileron collided with the ground.

The airplane sustained substantial to the bottom right wing and aileron.

The pilot reported that there were no mechanical malfunctions or failures 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 failure to maintain directional control during the landing roll, which resulted in a ground-loop.

Findings

Personnel issues Aircraft control - Instructor/check pilot

Aircraft Directional control - Not attained/maintained

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Factual Information

History of Flight

| Landing-landing roll | Loss of control on ground (Defining event) |
|----------------------|--|
| Landing-landing roll | Collision with terr/obj (non-CFIT) |

Pilot Information

| Certificate: | Airline transport; Flight instructor | Age: | 61,Male |
|---------------------------|---|-----------------------------------|----------------|
| Airplane Rating(s): | Single-engine sea; Multi-engine sea | Seat Occupied: | Rear |
| Other Aircraft Rating(s): | None | Restraint Used: | 4-point |
| Instrument Rating(s): | Airplane | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 1 With waivers/limitations | Last FAA Medical Exam: | May 30, 2018 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | April 28, 2018 |
| Flight Time: | (Estimated) 24007 hours (Total, all aircraft), 5 hours (Total, this make and model), 8514 hours (Pilot In Command, all aircraft), 235 hours (Last 90 days, all aircraft), 89 hours (Last 30 days, all aircraft) | | |

Pilot Information

| Private | Age: | 63,Male |
|--|---|---|
| Cinale anaine land: Cinale anaine | | |
| Single-engine land; Single-engine sea | Seat Occupied: | Front |
| None | Restraint Used: | 4-point |
| None | Second Pilot Present: | Yes |
| None | Toxicology Performed: | No |
| Class 3 With waivers/limitations | Last FAA Medical Exam: | May 26, 2017 |
| No | Last Flight Review or Equivalent: | September 1, 2018 |
| (Estimated) 1272 hours (Total, all aircraft), 400 hours (Total, this make and model), 1180 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft) | | |
| | None None Class 3 With waivers/limitations No (Estimated) 1272 hours (Total, all airc (Pilot In Command, all aircraft), 20 ho | None Restraint Used: None Second Pilot Present: None Toxicology Performed: Class 3 With waivers/limitations Last FAA Medical Exam: No Last Flight Review or Equivalent: (Estimated) 1272 hours (Total, all aircraft), 400 hours (Total, this make and (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 9 hours |

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Aircraft and Owner/Operator Information

| Aircraft Make: | Boeing | Registration: | N27WE |
|-------------------------------|-------------------------------|-----------------------------------|-----------------|
| Model/Series: | B75N1 | Aircraft Category: | Airplane |
| Year of Manufacture: | 1943 | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 75-6651 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | April 1, 2018 Annual | Certified Max Gross Wt.: | 2950 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 2660 Hrs | Engine Manufacturer: | Lycoming |
| ELT: | C91A installed, not activated | Engine Model/Series: | R680-E3B |
| Registered Owner: | | Rated Power: | 300 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: | KCJR,316 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 16:15 Local | Direction from Accident Site: | 21° |
| Lowest Cloud Condition: | | Visibility | 10 miles |
| Lowest Ceiling: | Overcast / 2300 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.26 inches Hg | Temperature/Dew Point: | 28°C / 23°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Culpeper, VA (VA30) | Type of Flight Plan Filed: | None |
| Destination: | Culpeper, VA (CJR) | Type of Clearance: | None |
| Departure Time: | 10:30 Local | Type of Airspace: | Class G |
| | | | |

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Airport Information

| Airport: | Culpeper Rgnl CJR | Runway Surface Type: | Asphalt |
|----------------------|-------------------|----------------------------------|---------------------------|
| Airport Elevation: | 315 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 04 | IFR Approach: | None |
| Runway Length/Width: | 5000 ft / 100 ft | VER Approach/Landing: | Full ston:Traffic nattern |

Wreckage and Impact Information

| Crew Injuries: | 2 None | Aircraft Damage: | Substantial |
|---------------------|--------|-------------------------|---------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 38.525554,-77.859725(est) |

Administrative Information

| Investigator In Charge (IIC): | Hicks, Michael |
|-----------------------------------|---|
| Additional Participating Persons: | Ramon Smeltz; FAA; Dulles, VA |
| Original Publish Date: | September 26, 2019 |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=98291 |

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.

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