



National Transportation Safety Board

Aviation Accident Data Summary

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|--------------------------------|--------------------------------------|-------------------------|------------|
| Location: | Portsmouth, NH | Accident Number: | ERA13CA350 |
| Date & Time: | 08/02/2013, 2320 EDT | Registration: | N645PD |
| Aircraft: | CESSNA 172S | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

The pilot stated that in preparation for a night flight, he flew earlier that same evening. He inspected the airplane and noted the control lock was not installed in the control column. While searching for the control lock he located a “straight pin” in a seatback pocket and installed it. He left the airport and returned later than evening, and performed a preflight inspection of the airplane removing the straight pin. He departed and flew to his destination airport where he landed uneventfully. After landing he went to a fixed base operator and filed a flight plan for the return flight, then returned to the airplane and started the engine. He taxied to the run-up area of runway 34 where he performed the before takeoff checklist but did not check that the flight controls were free and clear for fear of having his tablet knocked off the yoke mount. He advised the controller that he was ready for departure and was cleared for takeoff.

He taxied onto the runway and applied power noting the airspeed increased normally. After the airplane rotated it climbed to an altitude of about 3 feet and settled back down on the runway and bounced. Confused as to what was occurring, he added nose up trim to assist in the climb. At this point the airplane climbed to about 10 feet, then the nose pitched downward and the nose wheel struck the runway. After coming to a stop he switched the headlamp he was wearing from red to white and noticed the pin used to secure the flight controls was in the control lock hole. He removed the pin and retained possession of it.

Post accident inspection of the airplane by a FAA inspector revealed substantial damage to the firewall.

Flight Events

Prior to flight - Preflight or dispatch event

Initial climb - Loss of control in flight

Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

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

The pilot’s inadequate preflight inspection resulting in his failure to remove the pin he used to lock the flight controls in place of the approved control lock.

Findings

Aircraft-Aircraft systems-Flight control system-Gust lock or damper-Inadequate inspection - C

Personnel issues-Task performance-Inspection-Preflight inspection-Pilot - C

Pilot Information

| | | | |
|----------------------------------|--|------------------------------|----------|
| Certificate: | Private | Age: | 33 |
| Airplane Rating(s): | Single-engine Land | Instrument Rating(s): | Airplane |
| Other Aircraft Rating(s): | None | Instructor Rating(s): | None |
| Flight Time: | 204 hours (Total, all aircraft), 149 hours (Total, this make and model), 108 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|---|--------------------------------------|-----------------------------|-----------------|
| Aircraft Manufacturer: | CESSNA | Registration: | N645PD |
| Model/Series: | 172S | Engines: | 1 Reciprocating |
| Operator: | Westfield Flight Academy | Engine Manufacturer: | LYCOMING |
| Air Carrier Operating Certificate: | None | Engine Model/Series: | I0-360-L2A |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Meteorological Information and Flight Plan

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|---|----------------------------------|-------------------------------------|------------------------------|
| Observation Facility, Elevation: | PSM, 100 ft msl | Weather Information Source: | Weather Observation Facility |
| Conditions at Accident Site: | Visual Conditions | Lowest Ceiling: | Overcast / 12000 ft agl |
| Condition of Light: | Night | Wind Speed/Gusts, Direction: | 3 knots, 230° |
| Temperature: | 20°C / 14°C | Visibility | 10 Miles |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Portsmouth, NH (PSM) | Destination: | Westfield, ME (BAF) |

Airport Information

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|-----------------------------|---------------------------------|----------------------------------|---------|
| Airport: | Portsmouth Intn'l Airport (PSM) | Runway Surface Type: | Asphalt |
| Runway Used: | 34 | Runway Surface Condition: | Dry |
| Runway Length/Width: | 11321 ft / 150 ft | | |

Wreckage and Impact Information

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|----------------------------|--------|----------------------------|-------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |

Administrative Information

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|--------------------------------------|---|----------------------|------------|
| Investigator In Charge (IIC): | Timothy W Monville | Adopted Date: | 09/12/2013 |
| 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=87686 | | |

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.