



National Transportation Safety Board Aviation Accident Final Report

Location:	Portsmouth, NH	Accident Number:	ERA13CA350
Date & Time:	08/02/2013, 2320 EDT	Registration:	N645PD
Aircraft:	CESSNA 172S	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	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 that 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.

Probable Cause and Findings

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	Gust lock or damper - Inadequate inspection (Cause)
Personnel issues	Preflight inspection - Pilot (Cause)

Factual Information

History of Flight

Prior to flight	Preflight or dispatch event
Initial climb	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	33, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without Waivers/Limitations	Last Medical Exam:	01/11/2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	03/21/2013
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	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	172S8644
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	06/19/2013, 100 Hour	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	59 Hours	Engines:	1 Reciprocating
Airframe Total Time:	5398 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	I0-360-L2A
Registered Owner:	CLIMB ON LLC	Rated Power:	180 hp
Operator:	Westfield Flight Academy	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	PSM, 100 ft msl	Observation Time:	2346 EDT
Distance from Accident Site:		Condition of Light:	Night
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Scattered / 9500 ft agl	Temperature/Dew Point:	20° C / 14° C
Lowest Ceiling:	Overcast / 12000 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 230°	Visibility (RVR):	
Altimeter Setting:	29.83 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Portsmouth, NH (PSM)	Type of Flight Plan Filed:	IFR
Destination:	Westfield, ME (BAF)	Type of Clearance:	IFR
Departure Time:	2320 EDT	Type of Airspace:	

Airport Information

Airport:	Portsmouth Intn'l Airport (PSM)	Runway Surface Type:	Asphalt
Airport Elevation:	100 ft	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	Unknown
Runway Length/Width:	11321 ft / 150 ft	VFR Approach/Landing:	None

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		

Administrative Information

Investigator In Charge (IIC):	Timothy W Monville	Adopted Date:	09/12/2013
Additional Participating Persons:	Ron Hodgdon; FAA/FSDO; Portland, ME		
Publish 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		

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