



# **Aviation Investigation Final Report**

Location: Lebanon, Indiana Accident Number: CEN16CA360

Date & Time: August 25, 2016, 15:10 Local Registration: N2614N

Aircraft: Cessna 140 Aircraft Damage: Substantial

**Defining Event:** Nose over/nose down **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot reported that during the landing approach to the grass runway he had ample time to observe the runway surface and the turf appeared smooth and even. He continued the approach and executed a soft field landing. While on the landing roll, he noticed a puddle of water ahead. He commanded full up elevator and attempted to "jump" the puddle, but the airplane had already slowed below flight speed. The main landing gear of the tailwheel equipped airplane struck the standing water that was about 3 inches deep, and hidden by the grass. The airplane slowed abruptly and the airplane subsequently nosed-over resulting in substantial damage to the vertical tail, and right wing strut. The pilot reported that there were no mechanical malfunctions of the airplane.

#### **Probable Cause and Findings**

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

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The unseen standing water on the runway that abruptly slowed the tailwheel equipped airplane during landing resulting in a nose-over.

### **Findings**

**Environmental issues** 

Wet surface - Effect on equipment

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### **Factual Information**

### **History of Flight**

Landing-landing roll	Nose over/nose down (Defining event)	

#### **Pilot Information**

Certificate:	Private	Age:	71,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 15, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 21, 2014
Flight Time:	1584 hours (Total, all aircraft), 1278 hours (Total, this make and model), 1499 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

#### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N2614N
Model/Series:	140 G	Aircraft Category:	Airplane
Year of Manufacture:	1947	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	12874
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	November 30, 2015 Annual	Certified Max Gross Wt.:	1601 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2900 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	C85 SERIES
Registered Owner:	On file	Rated Power:	85 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FKR	Distance from Accident Site:	15 Nautical Miles
Observation Time:	14:50 Local	Direction from Accident Site:	0°
<b>Lowest Cloud Condition:</b>	Scattered / 2000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	27°C / 21°C
Precipitation and Obscuration:			
Departure Point:	FRANKFORT, IN (FKR)	Type of Flight Plan Filed:	None
Destination:	Lebanon, IN (614)	Type of Clearance:	None
Departure Time:	14:50 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:	BOONE COUNTY 614	Runway Surface Type:	Grass/turf
Airport Elevation:	959 ft msl	<b>Runway Surface Condition:</b>	Standing water;Wet
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	3600 ft / 30 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## 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	Latitude, Longitude:	40.007221,-86.440551

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#### **Administrative Information**

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	David Shaul; FAA - Indianapolis FSDO; Indianapolis, IN
Original Publish Date:	December 5, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=93970

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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 here.

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