

# **Aviation Investigation Final Report**

Location: Palmyra, Wisconsin Accident Number: CHI05CA167

Date & Time: July 2, 2005, 08:55 Local Registration: N95145

Aircraft: Taylorcraft BC12-D Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

## **Analysis**

The airplane was substantially damaged when it nosed over during landing rollout following a loss directional control. The flight instructor reported that during landing rollout, with the tail wheel on the ground, the airplane drifted to the right. He stated that the student responded by applying right rudder and lost directional control. He stated that there were no malfunctions associated with the airplane. The dual student stated that directional control of the airplane was lost during landing. He reported that he applied too much brake pressure during the event. The airplane subsequently nosed over. A witness who was flying in the airport traffic pattern reported that the accident airplane touched down on the "far left side" of runway 9. He stated that the accident airplane then turned approximately 45-degrees to the right. When the airplane reached the right side of the runway it "flipped over." The instructor noted that this was the student's fourth flight lesson. The student had logged approximately 3 hours flight time.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of directional control by the dual student and delayed remedial action by the flight instructor resulting in the airplane nosing over.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings
1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT

2. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)
3. TERRAIN CONDITION - GROUND

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Occurrence #2: NOSE OVER

Phase of Operation: LANDING - ROLL

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#### **Factual Information**

On July 2, 2005, at 0855 central daylight time, a Taylorcraft BC12-D, N95145, piloted by a flight instructor and dual student, was substantially damaged when it nosed over during landing rollout on runway 9 (2,800 feet by 200 feet, turf) at Palmyra Municipal Airport (88C), Palmyra, Wisconsin. The instructional flight was being conducted under 14 CFR Part 91 without a flight plan. Visual meteorological conditions prevailed. The flight instructor and dual student reported no injuries. The local flight departed 88C about 0845.

The flight instructor stated that the flight remained in the airport traffic pattern in order to practice landings. He reported that during landing rollout, with the tail wheel on the ground, the airplane drifted to the right. He stated that the student responded by applying right rudder and lost directional control. He stated that there were no malfunctions associated with the airplane. The instructor noted that this was the student's fourth flight lesson. The student had logged approximately 3 hours flight time.

The dual student stated that directional control of the airplane was lost during landing. He reported that he applied too much brake pressure during the event and the airplane subsequently nosed over.

A witness who was flying in the airport traffic pattern reported that the accident airplane touched down on the "far left side" of runway 9. He stated that the accident airplane then turned approximately 45-degrees to the right. When the airplane reached the right side of the runway it "flipped over."

Winds recorded at Burlington Municipal Airport (BUU), Burlington, Wisconsin, located 17 nautical miles southeast of 88C, at 0855, were from 110 degrees at 3 knots.

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## **Flight instructor Information**

Certificate:	Commercial; Flight instructor	Age:	84,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	October 1, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 1, 2003
Flight Time:	4444 hours (Total, all aircraft), 53 hours (Total, this make and model), 2330 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

# **Student pilot Information**

Certificate:	None	Age:	39,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	3 hours (Total, all aircraft), 3 hours (Total, this make and model)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	Taylorcraft	Registration:	N95145
Model/Series:	BC12-D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	9545
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 1, 2004 Annual	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:	7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2143 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	A65-8
Registered Owner:	On file	Rated Power:	65 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BUU,851 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	08:55 Local	Direction from Accident Site:	132°
<b>Lowest Cloud Condition:</b>	Scattered / 2500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Palmyra, WI (88C)	Type of Flight Plan Filed:	None
Destination:	(88C)	Type of Clearance:	None
Departure Time:	08:45 Local	Type of Airspace:	

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# **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:	42.883609,-88.597503

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#### **Administrative Information**

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Norman Widen; Milwaukee FSDO
Original Publish Date:	October 27, 2005
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=62021

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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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