



# Aviation Investigation Final Report

<b>Location:</b>	Belle Chase, Louisiana	<b>Accident Number:</b>	CEN12CA185
<b>Date &amp; Time:</b>	March 11, 2012, 12:45 Local	<b>Registration:</b>	N3424Y
<b>Aircraft:</b>	Cessna 180H	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Sys/Comp malf/fail (non-power)	<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

On downwind, the pilot noticed that the wind had increased and that there was light turbulence. He planned to land beyond some trees to avoid turbulence. The airplane encountered a wind gust during the landing roll. The pilot applied rudder and aileron corrections along with heavy braking. The airplane exited the runway and impacted a pipe rack resulting in substantial damage to the left wing. A postaccident examination of the airplane revealed that a tailwheel spring was bent, and its spring rate was weak, which allowed the tailwheel's fork to caster freely by not engaging into its machined locking detent.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The bent tailwheel spring that allowed the tailwheel to caster when the airplane encountered a wind gust on landing roll.

## Findings

<b>Environmental issues</b>	Gusts - Contributed to outcome
<b>Aircraft</b>	Nose/tail landing gear - Fatigue/wear/corrosion
<b>Aircraft</b>	Nose/tail landing gear - Malfunction
<b>Aircraft</b>	Directional control - Attain/maintain not possible

## Factual Information

### History of Flight

<b>Landing-landing roll</b>	Sys/Comp malf/fail (non-power) (Defining event)
<b>Landing-landing roll</b>	Loss of control on ground
<b>Landing-landing roll</b>	Runway excursion

### Pilot Information

<b>Certificate:</b>	Airline transport; Flight engineer	<b>Age:</b>	74, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	January 19, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	February 24, 2012
<b>Flight Time:</b>	31055 hours (Total, all aircraft), 5323 hours (Total, this make and model), 7 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N3424Y
<b>Model/Series:</b>	180H	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18051896
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 1, 2012 Annual	<b>Certified Max Gross Wt.:</b>	2800 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	C91 installed, not activated	<b>Engine Model/Series:</b>	O-470R
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	230 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	NGB,2 ft msl	<b>Distance from Accident Site:</b>	2 Nautical Miles
<b>Observation Time:</b>	12:51 Local	<b>Direction from Accident Site:</b>	170°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 2200 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	19 knots / 23 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	120°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.2 inches Hg	<b>Temperature/Dew Point:</b>	24°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Pascagoula, MS (PQL )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Belle Chase, LA (65LA)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:05 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	Southern Seaplane Airport 65LA	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	02	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3200 ft / 40 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	29.866111,-90.022224(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Malinowski, Edward
<b>Additional Participating Persons:</b>	Terry Macon; Federal Aviation Administration; Baton Rouge, LA
<b>Original Publish Date:</b>	May 21, 2012
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=83106">https://data.nts.gov/Docket?ProjectID=83106</a>

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