



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Santa Teresa, New Mexico	Accident Number:	CEN18LA222
Date & Time:	June 10, 2018, 12:00 Local	Registration:	N43443
Aircraft:	Taylorcraft BC12 D	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during a touch-and-go landing in the tailwheel-equipped airplane, he felt an "unusual mechanical sensation," but was able to maintain directional control and continued the takeoff. During his second landing approach, the airplane "aggressively weathercocked" into the wind on short final approach and the airplane touched down tailwheel first. During the landing roll, the airplane started to veer left, and the pilot was unable to correct with rudder input. The airplane continued off the left side of the runway and nosed over, resulting in substantial damage.

After the accident, the pilot noted that the left rudder spring had disconnected from the arm of the steerable tailwheel and the safety wire was missing. The pilot reconnected the spring before the airplane could be examined; whether the tailwheel spring contributed to the loss of control could not be determined.

The recorded weather conditions about the time of the accident included a left quartering tailwind at 6 knots with gusts to 13 knots for the landing runway.

Probable Cause and Findings

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

The pilot's loss of directional control during landing in gusting crosswind conditions for reasons that could not be determined based on the available information.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Use of equip/system - Pilot
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
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On June 10, 2018, about 1200 mountain daylight time, a Taylorcraft BC-12D airplane, N43443, was substantially damaged when it was involved in an accident near Santa Teresa, New Mexico. The private pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot was conducting a touch-and-go landing on runway 28 when he felt an “unusual mechanical sensation” just before rotation. He departed again and remained in the airport traffic pattern for runway 28. Upon turning from base to final, the pilot saw two white and two red lights on the precision approach path indicator and also noticed the windsock indicating erratic wind directions, varying between a headwind and crosswind. As the airplane neared the runway, he then felt it “aggressively weathercock” to the left from a crosswind gust, and he applied control inputs to realign the airplane. The pilot decided it was too late to perform a go-around and chose to continue the landing. The tailwheel contacted the runway first, followed by the main gear. The pilot pulled the throttle back completely to idle, but the rudder inputs seemed only “partially responsive,” and the airplane continued to veer off the runway toward the left. He applied full rudder and heel-brakes to prevent a ground loop; however, the airplane continued to veer left, then exited the runway and nosed over, resulting in substantial damage to the horizontal stabilizer and rudder. The recorded wind about the time of the accident was from 160° at 6 knots with gusts to 13 knots.

Following the accident, the pilot performed a visual inspection of the airplane and noted that the left rudder spring had disconnected from the tailwheel control arm and the safety wire was missing. A Federal Aviation Administration (FAA) inspector examined the airplane and saw that the left rudder spring had been reattached. The pilot reported that, after the accident, he and a mechanic had reattached the spring. After looking at the assembly, the FAA inspector was unable to determine whether the spring detached during or prior to the accident.

Pilot Information

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
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:	November 28, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 11, 2016
Flight Time:	340 hours (Total, all aircraft), 95 hours (Total, this make and model), 233 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N43443
Model/Series:	BC12 D D	Aircraft Category:	Airplane
Year of Manufacture:	1946	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7102
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 9, 2017 100 hour	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:	85 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2300 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	A65-8F
Registered Owner:		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:	KDNA, 4113 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	11:55 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots / 13 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	32°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	El Paso, TX (KELP)	Type of Flight Plan Filed:	None
Destination:	Anthony, NM (NM05)	Type of Clearance:	VFR
Departure Time:	11:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	Dona Ana County International Airport DNA	Runway Surface Type:	Asphalt
Airport Elevation:	4112 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	9550 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	31.880556,-106.70333(est)

Administrative Information

Investigator In Charge (IIC):	Liedler, Courtney		
Additional Participating Persons:	Ken Hand; FAA; Albuquerque, NM		
Original Publish Date:	May 25, 2021	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97448		

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).