



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Reno, Nevada	Accident Number:	WPR19LA138
Date & Time:	May 4, 2019, 19:15 Local	Registration:	N6684Z
Aircraft:	Beech 36	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was landing the airplane in gusty wind conditions when he lost directional control of the airplane. After touchdown, the airplane veered off the runway to the left, despite the pilot's corrective inputs. Subsequently, the airplane exited the runway, struck two runway signs, and spun to the right before coming to a stop.

An examination of the airplane revealed that the nosewheel would not center and that it pointed to the right. Impact damage was visible on the nosewheel strut assembly. Additionally, when the right rudder pedal was pushed to the full position, the right rudder was about 5° from full deflection. It could not be determined whether these anomalies were impact related. The airplane would have had right turning tendencies if the nosewheel condition existed during the landing. The pilot would have had less rudder authority available to counter the left turning tendencies if the rudder condition existed during landing. No other mechanical malfunctions or failures that would have precluded normal operation were observed.

The circumstances of the accident are consistent with the pilot's inability to maintain directional control during landing in strong, gusty wind conditions.

Probable Cause and Findings

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

The pilot's inability to maintain directional control during landing in gusty crosswind conditions for reasons that could not be determined based on available evidence.

Findings

Not determined	(general) - Unknown/Not determined
Aircraft	Directional control - Attain/maintain not possible

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion
Landing-landing roll	Collision with terr/obj (non-CFIT)

On May 4, 2019, about 1915 Pacific daylight time, a Beech A36 airplane N6684Z, was substantially damaged when it was involved in an accident at the Reno/Tahoe International Airport (RNO), Reno, Nevada. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* (CFR) Part 91 personal flight.

According to the pilot, he was landing on runway 25 when, despite his right rudder inputs, the airplane veered left off the runway. The airplane continued onto an intersecting runway, striking two runway signs and making a tight 360° turn to the right before stopping. The pilot stated that he was unaware of why he lost directional control of the airplane on the ground. About the time of the accident, the reported wind was from 310° at 15 knots, gusting to 29 knots.

The airplane was examined by a certified airframe and powerplant (A&P) mechanic, under the supervision of a Federal Aviation Administration (FAA) inspector. No anomalies were noted with the brake system or tires. The airplane was lifted on jacks to facilitate a landing gear examination. During the examination, the rudder pedals moved freely and there was no binding or anything impeding their movement. The left rudder was noted to fully deflect. However, when the right rudder pedal was pushed to the full position, the right rudder was about 5° from full deflection. Additionally, the nosewheel strut assembly exhibited impact damage. The nosewheel would not center and pointed slightly to the right. The investigation could not determine if the nosewheel and rudder were out of alignment before the accident or if their misalignment was due to impact damage.

Pilot Information

Certificate:	Commercial	Age:	81,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	August 1, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 1, 2016
Flight Time:	(Estimated) 2789 hours (Total, all aircraft), 2330 hours (Total, this make and model), 2 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6684Z
Model/Series:	36 A36	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	E-1611
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	August 2, 2018 Annual	Certified Max Gross Wt.:	3651 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3553.3 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-550-B
Registered Owner:		Rated Power:	300 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:	KRNO, 4400 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	00:55 Local	Direction from Accident Site:	189°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 7000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 29 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.72 inches Hg	Temperature/Dew Point:	20°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Santa Barbara, CA (SBA)	Type of Flight Plan Filed:	Unknown
Destination:	Reno, NV (RNO)	Type of Clearance:	VFR; VFR flight following
Departure Time:	17:15 Local	Type of Airspace:	Class C

Airport Information

Airport:	Reno/Tahoe Intl RNO	Runway Surface Type:	Concrete
Airport Elevation:	4415 ft msl	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	Unknown
Runway Length/Width:	6102 ft / 150 ft	VFR Approach/Landing:	Full stop

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:	39.499168, -119.768058(est)

Administrative Information

Investigator In Charge (IIC):	Nixon, Albert		
Additional Participating Persons:	Lee Oscar; Federal Aviation Administration; Reno, NV James Richardson; Federal Aviation Administration; Reno, NV		
Original Publish Date:	May 3, 2022	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99399		

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](#).