



National Transportation Safety Board Aviation Accident Final Report

Location:	Kansas City, MO	Accident Number:	CEN12LA147
Date & Time:	02/02/2012, 1310 CST	Registration:	N6564V
Aircraft:	BELLANCA 17-30	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The pilot reported that after touchdown, the airplane suddenly veered off the left side of the runway. During the runway excursion, the airplane struck the precision approach path indicator light system, resulting in substantial damage to both wings. Postaccident examination of the airplane revealed that a rod end bearing on the nosewheel steering pushrod failed. As a result, the pilot was unable to operate the nosewheel steering.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the nosewheel steering pushrod, which resulted in a loss of airplane directional control and runway excursion.

Findings

Aircraft	Landing gear steering system - Failure (Cause) Directional control - Attain/maintain not possible (Cause)
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Factual Information

On February 2, 2012, about 1310 central standard time, a Bellanca model 17-30 airplane, N6564V, veered off of the left side of the runway while landing at the Charles B. Wheeler Downtown Airport (MKC), Kansas City, Missouri. During the runway excursion, the airplane struck the precision approach path indicator (PAPI) light system resulting in damage to both wings. The private pilot and flight instructor were not injured. The airplane sustained substantial damage to the fuselage and right wing. The aircraft was registered to and operated by the private pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. The pilot was receiving flight instruction at the time the accident occurred. Visual meteorological conditions prevailed for the flight, which was not operating on a flight plan. The local flight originated about 1145.

The pilot reported that after the previous takeoff, the red in-transit landing gear indicator light remained illuminated. He said that he cycled the landing gear and the light went out. The pilot reported that when he lowered the gear for landing at MKC, only two of the three green gear-down indicator lights illuminated. The landing approach was aborted and the pilot cycled the landing gear three times. At that point, all three green gear-down indicator lights illuminated. The pilot reported that the subsequent landing was normal, but as soon as the nose wheel touched down the airplane veered sharply to the left and off the runway.

A postaccident examination revealed a fractured spherical rod end for the nosewheel steering pushrod. The rod end was fractured in the threaded portion of the shank. The threaded portion of the rod end, along with the jam nut remained attached to the steering pushrod.

History of Flight

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

Certificate:	Commercial	Age:	80, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last Medical Exam:	04/28/2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	06/21/2010
Flight Time:	1035 hours (Total, all aircraft), 250 hours (Total, this make and model), 1035 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Flight Instructor Information

Certificate:	Airline Transport; Flight Engineer	Age:	73, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	07/12/2011
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BELLANCA	Registration:	N6564V
Model/Series:	17-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	30245
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2423 Hours	Engine Manufacturer:	CONT MOTOR
ELT:	C126 installed, not activated	Engine Model/Series:	IO 520 SERIES
Registered Owner:	On file	Rated Power:	300 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	MKC, 757 ft msl	Observation Time:	1300 CST
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	0°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	18° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Light and Variable, Variable	Visibility (RVR):	
Altimeter Setting:	30.25 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kansas City, MO (MKC)	Type of Flight Plan Filed:	None
Destination:	Kansas City, MO (MKC)	Type of Clearance:	VFR
Departure Time:	1145 CST	Type of Airspace:	

Airport Information

Airport:	Charles B. Wheeler Downtown (MKC)	Runway Surface Type:	Concrete
Airport Elevation:	757 ft	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	6827 ft / 150 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None		

Administrative Information

Investigator In Charge (IIC):	John M Brannen	Adopted Date:	08/07/2013
Additional Participating Persons:	Tom Bartels; FAA-Kansas City-FSDO; Kansas City, KS		
Publish Date:	08/07/2013		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=82808		

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