Aviation Investigation Final Report

Location:	Garberville, California	**Accident Number:**	WPR22LA008
Date & Time:	October 4, 2021, 12:00 Local	**Registration:**	N3453K
Aircraft:	Piper J3C-65	**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 tailwheel-equipped airplane when the accident occurred. He reported that, after conducting a wheel landing, the airplane veered to the right as the tailwheel touched down. He attempted to abort the landing; however, the airplane did not have enough airspeed and exited the right side of the runway, where it impacted an unoccupied parked airplane.

Postaccident examination of the airplane's tailwheel revealed that when installed on the airplane, it remained within the steering detents. When sufficient force was applied, the tailwheel traveled beyond the detent to the left; however, it did not travel beyond the detent to the right. In addition to the tailwheel spring clip, a braided portion of safety wire was attached to the steering arm and connector spring assembly. Once removed, the tailwheel functioned normally. Disassembly of the tailwheel did not reveal any preaccident mechanical failures or malfunctions that would have precluded normal operation.

It is likely that, while the tailwheel assembly was connected to airplane, the safety wire installed between the steering arm and connector spring assembly would not allow the tailwheel to rotate beyond the detent when moved to the right. However, the tailwheel not traveling beyond the detent to a full-swivel condition would not have prevented the pilot from maintaining direction control while landing.

Probable Cause and Findings

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

The pilot's failure to maintain directional control during the landing roll, which resulted in a runway excursion and subsequent collision with an unoccupied parked airplane.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)

On October 4, 2021, about 1200 Pacific daylight time, a Piper J3C-65, N3453K, was substantially damaged when it was involved in an accident near Garberville, California. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot of the tailwheel equipped airplane reported that, following a wheel landing, as the tailwheel touched down, the airplane veered to the right. The pilot attempted to abort the landing; however, the airplane did not have enough airspeed, and was “totally out of control.” The airplane subsequently exited the right side of the runway and impacted an unoccupied parked airplane before it came to rest upright.

Postaccident examination of the airplane by a Federal Aviation Administration inspector revealed that the right wing and both wing lift struts were substantially damaged. Flight control continuity was established from all primary flight control surfaces to the cockpit controls. The examination also showed that the airplane’s tailwheel rotated to the left, stopped at the detent and then swiveled freely when force was applied to the tailwheel. However, when tailwheel was rotated to the right, the tailwheel stopped at the detent and did not swivel beyond the detent when pressure was applied.

The tailwheel assembly was removed from the airplane and examined. Examination revealed that the tailwheel did not have any visible damage. Both left and right compression spring assemblies had been disconnected from the tailwheel steering arm. One spring and chain connector clip was not present; however, a braided portion of safety wire remained attached to steering arm, where the clip would normally be installed. The tailwheel rotated left and right and remained within the steering detents. When sufficient force was applied to the tailwheel both to the left and right directions, it rotated past the detent and fully swiveled. The tailwheel was disassembled and no preaccident mechanical failures or malfunctions were observed that would have precluded normal operation.

A review of the airplane maintenance records did not reveal any recent maintenance conducted on the tailwheel assembly.

Pilot Information

Certificate:	Commercial; Private	**Age:**	85,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	Glider	**Restraint Used:**	Unknown
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	Glider	**Toxicology Performed:**	
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	October 4, 2021
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	June 29, 2021
Flight Time:	(Estimated) 6000 hours (Total, all aircraft), 2000 hours (Total, this make and model), 5800 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	33,Male
Airplane Rating(s):	None	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Sport pilot Unknown	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 12 hours (Total, all aircraft), 12 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N3453K
Model/Series:	J3C-65	**Aircraft Category:**	Airplane
Year of Manufacture:	1946	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22144
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	April 28, 2021 Annual	**Certified Max Gross Wt.:**	1220 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	3255 Hrs as of last inspection	**Engine Manufacturer:**	Continental Motors
ELT:	C91 installed, not activated	**Engine Model/Series:**	C-85
Registered Owner:	On file	**Rated Power:**	100 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:	KFOT,391 ft msl	**Distance from Accident Site:**	32 Nautical Miles
Observation Time:	12:15 Local	**Direction from Accident Site:**	333°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	300°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	17°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Garberville, CA	**Type of Flight Plan Filed:**	None
Destination:	Garberville, CA	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

Airport Information

Airport:	GARBERVILLE O16	**Runway Surface Type:**	Asphalt
Airport Elevation:	550 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	36	**IFR Approach:**	None
Runway Length/Width:	2783 ft / 75 ft	**VFR Approach/Landing:**	Go around

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	40.085433,-123.81414(est)

Administrative Information

Investigator In Charge (IIC):	Gutierrez, Eric
Additional Participating Persons:	Justin Louw; Federal Aviation Administration; Oakland, CA
Original Publish Date:	March 22, 2023
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=104089