



Aviation Investigation Final Report

Location:	Lincoln Park, New Jersey	Accident Number:	ERA09CA437
Date & Time:	August 2, 2009, 12:00 Local	Registration:	N551N
Aircraft:	Piper PA-34-200T	Aircraft Damage:	Substantial
Defining Event:	Abnormal runway contact	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that because the runway was wet, he was "determined to touch down as close to the approach end as possible." On landing, the airplane bounced, and the nose and main landing gear subsequently collapsed. The airplane came to rest on the runway, approximately 1,700 feet beyond the landing threshold, and sustained substantial damage. An airport surveillance video camera captured the accident sequence. Review of the video indicated that the airplane first contacted the runway just beyond the displaced threshold, in a flat attitude, with no flare or float. The airplane bounced and re-contacted the runway on its nose landing gear, which then collapsed. This was followed by a series of rapid, large-amplitude pitch oscillations, and collapse of the main gear.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare, which resulted in a bounced landing, and the subsequent collapse of the landing gear.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Incorrect use/operation

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact (Defining event)
Landing	Runway excursion
Landing	Landing gear collapse

Pilot Information

Certificate:	Airline transport	Age:	67, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	May 21, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 15, 2008
Flight Time:	21682 hours (Total, all aircraft), 98 hours (Total, this make and model), 14156 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N551N
Model/Series:	PA-34-200T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34-7570197
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	February 17, 2009 Annual	Certified Max Gross Wt.:	4570 lbs
Time Since Last Inspection:	38 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3329 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	TSIO-360 SER
Registered Owner:	On file	Rated Power:	200 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:	CDW,173 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	175°
Lowest Cloud Condition:	Few / 1200 ft AGL	Visibility	8 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	22°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Morrisville, VT (MVL)	Type of Flight Plan Filed:	VFR/IFR
Destination:	Lincoln Park, NJ (N07)	Type of Clearance:	VFR;IFR;VFR flight following
Departure Time:	10:00 Local	Type of Airspace:	

Airport Information

Airport:	Lincoln Park Airport N07	Runway Surface Type:	Asphalt
Airport Elevation:	182 ft msl	Runway Surface Condition:	Wet
Runway Used:	19	IFR Approach:	Global positioning system
Runway Length/Width:	2942 ft / 40 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	40.947498,-74.314445(est)

Administrative Information

Investigator In Charge (IIC):	Muzio, David
Additional Participating Persons:	Thomas A Mancuso; FAA/FSDO; Saddle Brook, NJ
Original Publish Date:	March 3, 2010
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=74427

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