



National Transportation Safety Board Aviation Accident Final Report

Location:	Las Vegas, Nevada	Accident Number:	WPR12LA075
Date & Time:	January 5, 2012, 15:39 Local	Registration:	N104RM
Aircraft:	Piper AEROSTAR 601P	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, immediately after touchdown, the airplane began “wavering” and moments later veered to the left. He attempted to regain directional control with the application of “full right rudder” and the airplane subsequently departed the right side of the runway. A witness reported that the airplane’s touchdown was “firm” but not abnormal. As the airplane approached the left side of the runway, it yawed right and skidded down the runway while facing right. As the airplane began moving to the right side of the runway, the witness heard the right engine increase to near full power. The airplane spun to the left, coming to rest facing the opposite direction from its approach to landing. Another witness reported seeing the propellers contact the ground. The pilot attributed the loss of directional control to a main landing gear malfunction.

Postaccident examination of the airplane revealed that the left propeller assembly was feathered and that the right propeller blades were bent forward, indicative of the right engine impacting terrain under high power. Both throttle levers were found in the aft/closed position, and both propeller control levers were in the full-forward position. The propeller control levers exhibited little friction and could be moved with pressure from one finger. The evidence suggested that the pilot inadvertently feathered the left propeller assembly during the accident sequence. The pilot did not report any preaccident malfunctions or failures with the airplane’s engines or propeller assemblies that would have precluded normal operation.

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 of the airplane during the landing roll.

Findings

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

Factual Information

On January 5, 2012, at 1539 Pacific standard time, a Piper Aerostar 601P, N104RM, sustained substantial damage during a landing at North Las Vegas Airport (VGT), Las Vegas, Nevada. The private pilot, the sole occupant of the airplane, was not injured. The owner/pilot was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed for the personal local flight, which had originated approximately 39 minutes before the accident. A flight plan had not been filed.

The pilot stated that the purpose of the flight was to practice instrument landing approaches. On the third approach, he requested to side step from runway 12 left to 12 right for a full stop landing. The tower controller approved the side step and cleared him for landing. The pilot reported that almost immediately after touchdown, the airplane began “wavering” and moments later, veered to the left. He attempted to regain directional control with the application of “full right rudder” and subsequently the airplane departed the right side of the runway. The pilot attributed the loss of directional control to a main landing gear malfunction.

A witness said that the airplane’s landing touchdown was “firm” but not abnormal. Several witnesses observed the airplane to “fishtail” almost immediately after touchdown and drift towards the left side of the runway. As the airplane approached the left side of the runway, it “yawed” right and went “skidding” down the runway while facing right. The left engine propeller blades began contacting the runway. The witness said that as the airplane began moving to the right side of the runway, he heard the right engine increase to near full power. When the airplane entered the dirt on the right side of the runway, it spun to the left coming to rest facing the opposite direction from its approach to landing.

Postaccident inspection of the airplane by a Federal Aviation Administration (FAA) inspector revealed that both wings were bent up, the wing flaps were bent, the left wing’s fuel tank was compromised, and the fuselage had several holes in it. On January 25, 2012, the airplane was examined by the FAA inspector and a licensed mechanic. They found the left propeller assembly feathered, and the right propeller blades were bent forward. Examination of the cockpit revealed the both throttle leavers were in the aft/closed position, the propeller control leavers were full forward, and the mixture controls were full rich. The throttle levers in the cockpit exhibited normal operation and friction, but both propeller control levers exhibited little friction and could be moved with one finger’s pressure. The pilot had not reported any malfunctions with the airplane’s engines or their propeller assemblies.

A police video documented that moments after the accident, a police officer suggested that the pilot turn the airplane's electrical power off; the pilot was observed to reenter the accident airplane.

The mechanic suggested that the forward bending of the right propeller blades indicated that the right engine was at a high power setting when it contacted the ground and that the airplane was sliding backwards. Additional, the right wing flaps were bent forward indicating aft movement at the time of terrain contact. The airplane’s nose and main landing gears were examined, and no preimpact anomalies were identified.

History of Flight

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

Pilot Information

Certificate:	Private	Age:	71, 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 With waivers/limitations	Last FAA Medical Exam:	November 18, 2010
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	January 14, 2011
Flight Time:	3900 hours (Total, all aircraft), 1700 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N104RM
Model/Series:	AEROSTAR 601P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	61P07568063375
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 3, 2011 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	4480 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540 SER
Registered Owner:		Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	VGT,2191 ft msl	Distance from Accident Site:	
Observation Time:	15:51 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	18° C / -9° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	North Las Vegas, NV (VGT)	Type of Flight Plan Filed:	Unknown
Destination:	North Las Vegas, NV (VGT)	Type of Clearance:	
Departure Time:	15:00 Local	Type of Airspace:	

Airport Information

Airport:	North Las Vegas Airport VGT	Runway Surface Type:	Asphalt
Airport Elevation:	2191 ft msl	Runway Surface Condition:	Dry
Runway Used:	12R	IFR Approach:	ILS
Runway Length/Width:	5000 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.20861,-115.195274

Administrative Information

Investigator In Charge (IIC): Struhsaker, James

Additional Participating Persons: Marty Kay; FAA FSDO; Las Vegas, NV

Original Publish Date: August 7, 2013

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=82624>

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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](#).