



Aviation Investigation Final Report

Location:	Independence, Oregon	Accident Number:	GAA18CA562
Date & Time:	September 19, 2018, 07:23 Local	Registration:	N5RJ
Aircraft:	Rutan RUTAN LONG EZ	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot in the experimental, amateur-built airplane reported that, during his third touch-and-go landing, the airplane's airspeed was fast and that it landed hard. The airplane's nose landing gear collapsed, and the airplane exited the right side of the runway. The airplane cartwheeled and came to rest upright.

The airplane sustained substantial damage to the right wing spar.

The pilot reported that there were no mechanical malfunctions or failures with the airplane 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 a proper descent rate, which resulted in a hard landing.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Airspeed - Not attained/maintained
Aircraft	Descent rate - Not attained/maintained

Factual Information

History of Flight

Landing	Hard landing (Defining event)
Landing	Landing gear collapse
Landing	Loss of control on ground
Landing	Runway excursion

Pilot Information

Certificate:	Commercial	Age:	87,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None None	Last FAA Medical Exam:	April 1, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 1, 2016
Flight Time:	(Estimated) 3000 hours (Total, all aircraft), 28 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Rutan	Registration:	N5RJ
Model/Series:	RUTAN LONG EZ No Series	Aircraft Category:	Airplane
Year of Manufacture:	1996	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	739
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	July 19, 2018 Annual	Certified Max Gross Wt.:	1325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	628 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91 installed, activated, aided in locating accident	Engine Model/Series:	O-320
Registered Owner:		Rated Power:	160 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:	KSLE, 201 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	14:56 Local	Direction from Accident Site:	75°
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:	30.12 inches Hg	Temperature/Dew Point:	9°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Independence, OR (7S5)	Type of Flight Plan Filed:	None
Destination:	Independence, OR (7S5)	Type of Clearance:	None
Departure Time:	07:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	INDEPENDENCE STATE 7S5	Runway Surface Type:	Asphalt
Airport Elevation:	180 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	3142 ft / 60 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	44.866943,-123.198333(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Ken Bradshaw; FAA; Portland, OR
Original Publish Date:	September 26, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98333

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](#).