



# Aviation Investigation Final Report

<b>Location:</b>	Hermiston, Oregon	<b>Accident Number:</b>	WPR21LA162
<b>Date &amp; Time:</b>	April 17, 2021, 14:00 Local	<b>Registration:</b>	N51080
<b>Aircraft:</b>	THRUSH AIRCRAFT LLC S2R-T660	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing gear collapse	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

The pilot of the tailwheel-equipped airplane reported that, during the takeoff roll, the left main landing gear tire failed. The airplane veered left, exited the runway and impacted terrain. The right wing and the engine truss sustained substantial damage. The pilot added that there were no preaccident 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 loss of directional control due to a blown tire, which resulted in a runway excursion and impact with terrain.

### Findings

<b>Aircraft</b>	Tire casing - Failure
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Aircraft</b>	Directional control - Not attained/maintained



## Factual Information

### History of Flight

<b>Takeoff</b>	Landing gear collapse (Defining event)
<b>Takeoff</b>	Loss of control on ground
<b>Takeoff</b>	Runway excursion
<b>Takeoff</b>	Collision with terr/obj (non-CFIT)

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 5, 2021
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	November 4, 2019
<b>Flight Time:</b>	(Estimated) 2700 hours (Total, all aircraft), 2500 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	THRUSH AIRCRAFT LLC	<b>Registration:</b>	N51080
<b>Model/Series:</b>	S2R-T660 NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2020	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Restricted (Special)	<b>Serial Number:</b>	T660-158DC
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 9, 2021 Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	14500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo prop
<b>Airframe Total Time:</b>	130 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	PT6-67AG
<b>Registered Owner:</b>	K2 AERIAL APPLICATION LLC	<b>Rated Power:</b>	1350 Horsepower
<b>Operator:</b>	K2 AERIAL APPLICATION LLC	<b>Operating Certificate(s) Held:</b>	Agricultural aircraft (137)

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	HRI,300 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	13:53 Local	<b>Direction from Accident Site:</b>	220°
<b>Lowest Cloud Condition:</b>		<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.22 inches Hg	<b>Temperature/Dew Point:</b>	24°C / -2°C
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Hermiston, OR	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Hermiston, OR	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	HERMISTON MUNI HRI	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	644 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	05/23	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4501 ft / 75 ft	<b>VFR Approach/Landing:</b>	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>		<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	45.828222,-119.25916(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Nepomuceno, Eleazar
<b>Additional Participating Persons:</b>	Keith Ruconich; FAA; Portland, OR
<b>Original Publish Date:</b>	September 20, 2021
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class 4</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=102936">https://data.ntsb.gov/Docket?ProjectID=102936</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).