



# Aviation Investigation Final Report

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<b>Location:</b>	Palmer, Alaska	<b>Accident Number:</b>	ANC17LA042
<b>Date &amp; Time:</b>	August 4, 2017, 19:00 Local	<b>Registration:</b>	N6523T
<b>Aircraft:</b>	Beech 19A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control on ground	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

According to the private pilot, while landing at a remote, unimproved airstrip, the right main landing (MLG) tire impacted a rock. The airplane then began to veer right, and the MLG collapsed, which resulted in substantial damage to the empennage and horizontal stabilizer.

Postaccident examination of the airplane revealed that the right MLG separated near its attachment point. Visual and magnified optical examinations of the fractured surfaces revealed features consistent with a bending overstress fracture. Due to the pilot's selection of unsuitable terrain to land, the right main tire impacted a rock, which resulted in the subsequent loss of directional control and collapse of the right MLG.

## Probable Cause and Findings

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

The pilot's selection of unsuitable terrain for landing, which resulted in the right main landing (MLG) tire impacting a rock and the subsequent loss of directional control and collapse of the right MLG.

## Findings

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<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Environmental issues</b>	(general) - Decision related to condition
<b>Environmental issues</b>	Debris/dirt/foreign object - Effect on operation

## Factual Information

### History of Flight

Landing-landing roll	Collision with terr/obj (non-CFIT)
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Landing gear collapse

On August 4, 2017, about 1900 Alaska daylight time, a tricycle gear equipped Beech BE19 airplane, N6523T, sustained substantial damage while landing at a remote unimproved airstrip, about 25 miles southeast of Palmer, Alaska. The airplane was being operated by the pilot as a 14 *Code of Federal Regulations* Part 91 visual flight rules flight. The private pilot and passenger were not injured. Visual meteorological conditions prevailed, and no flight plan had been filed. The flight departed Merrill Field Airport (PAMR), Anchorage, Alaska at about 1745.

According to the pilot, while landing at a remote unimproved airstrip, the right main tire impacted a rock. The airplane began to veer to the right, and the right main gear collapsed, which resulted in substantial damage to the empennage and horizontal stabilizer.

A National Transportation Safety Board (NTSB) Senior Metallurgist reported that visual and magnified optical examination of the fractured surfaces revealed features consistent with a bending overstress separation. No indications of preexisting fatigue, corrosion or significant porosity were detected. (A synopsis of the NTSB Metallurgist's case review is included in the public docket for this accident.)

In the recommendation section of the NTSB Accident/Incident Reporting Form 6120.1, the pilot stated that the accident may have been avoided if the Federal Aviation Administration or Alaska Department of Transportation would have provided minimal funding to local pilot groups to provide minimal maintenance of routinely used backcountry airstrips.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	August 20, 2015
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1200 hours (Total, all aircraft), 303 hours (Total, this make and model), 1127 hours (Pilot In Command, all aircraft), 62 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N6523T
<b>Model/Series:</b>	19A A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1968	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	MB-357
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	June 9, 2017 Annual	<b>Certified Max Gross Wt.:</b>	2250 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3802.03 Hrs at time of accident	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	O-320 SERIES
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PAAQ	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	02:53 Local	<b>Direction from Accident Site:</b>	318°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	190°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.19 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	ANCHORAGE, AK (MRI)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	ANCHORAGE, AK (MRI)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	62.521945,-148.587219(est)

## Administrative Information

**Investigator In Charge (IIC):** Banning, David

**Additional Participating Persons:**

**Original Publish Date:** November 6, 2019

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:** The NTSB did not travel to the scene of this accident.

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=95768>

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](#).