



Aviation Investigation Final Report

Location:	Pedro Bay, Alaska	Accident Number:	ANC18LA067
Date & Time:	August 18, 2018, 10:00 Local	Registration:	N441GR
Aircraft:	Cessna U206	Aircraft Damage:	Substantial
Defining Event:	Part(s) separation from AC	Injuries:	6 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

According to the pilot, before landing on the tidal beach, he conducted two passes over the landing area to check for debris and determine wind direction. He stated that, after touchdown on the beach, the airplane felt like it had a flat tire and subsequently veered to the right. The airplane came to rest in a left-wing-low attitude on a tidal mudflat and sustained substantial damage to the left wing, left horizontal stabilizer, and left elevator.

The pilot examined the airplane and noted that both main landing gear legs had separated just above the main axle attach point. A laboratory examination revealed that both main landing gear legs failed due to fatigue cracking.

Probable Cause and Findings

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

The fatigue fracture of both main landing gear legs during the landing roll, which resulted in the collapse and separation of both main landing gear legs.

Findings

Aircraft	Main landing gear - Failure
Aircraft	Main landing gear - Fatigue/wear/corrosion

Factual Information

History of Flight

Landing-landing roll	Part(s) separation from AC (Defining event)
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On August 18, 2018, about 1000 Alaska daylight time, a Cessna U206F airplane, N441GR, sustained substantial damage while landing at a remote unimproved tidal beach about 36 miles east of Pedro Bay, Alaska. The airplane was registered to AK Air Leasing, LLC and operated by K Bay Air, LLC as a visual flight rules (VFR) on-demand commercial flight under the provisions of 14 *Code of Federal Regulations* Part 135 when the accident occurred. The commercial pilot and five passengers were not injured. Visual meteorological conditions prevailed, and company flight following procedures were in effect. The flight departed Homer, Alaska, about 0900.

According to the pilot, before landing on the tidal beach, he conducted two passes over the landing area to check for debris and determine wind direction. After a stable approach, the left main and uphill tire touched down first followed by the right main tire. The pilot stated that after touchdown, it "felt like" the airplane had a flat tire and it subsequently veered to the right and came to rest in a left wing low attitude on a tidal mudflat. The airplane sustained substantial damage to the left wing, left horizontal stabilizer and left elevator.

An initial examination of the airplane, by the pilot, revealed that both main landing gear legs separated just above the main axle attach point.

An examination by the National Transportation Safety Board (NTSB) Materials Laboratory revealed that both main landing gear legs exhibited chevron marks leading to a thumbnail region consistent with fatigue cracking.

The NTSB Materials Laboratory examination report is in the public docket for this accident.

Pilot Information

Certificate:	Commercial	Age:	39,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	April 3, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 29, 2018
Flight Time:	4400 hours (Total, all aircraft), 1660 hours (Total, this make and model), 4300 hours (Pilot In Command, all aircraft), 204 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N441GR
Model/Series:	U206 F	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U20601801
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	August 10, 2018 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Reciprocating
Airframe Total Time:	4480 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	C126 installed, not activated	Engine Model/Series:	IO-520-F
Registered Owner:		Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	K99C

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAHO	Distance from Accident Site:	
Observation Time:	17:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Overcast / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.29 inches Hg	Temperature/Dew Point:	12°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Homer, AK (PAHO)	Type of Flight Plan Filed:	Company VFR
Destination:	Pedro Bay, AK	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	59.796943,-154.129714(est)

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	Jeffery Burch; Federal Aviation Administration; AK
Original Publish Date:	June 8, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98182

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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](#).