



Aviation Investigation Final Report

Location:	Cordova, Alaska	Accident Number:	ANC16CA049
Date & Time:	July 20, 2016, 09:00 Local	Registration:	N1222V
Aircraft:	Cessna U206	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	5 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that while landing the tricycle-gear airplane on a remote beach, he "landed a little hard, but not too hard." Following touchdown, the right main landing gear separated at the axle, the right wing impacted the ground, and the left main landing gear collapsed. Subsequently, the left wing and the left horizontal stabilizer impacted the ground and sustained substantial damage.

The pilot reported that there were no preimpact mechanical failures or malfunctions with the airframe or engine that would have precluded normal operation.

The Federal Aviation Administration has published the Airplane Flying Handbook FAA-H-8083-3A (2004). This handbook discusses soft-field landings and states in part:

Landing on fields that are rough or have soft surfaces, such as snow, sand, mud, or tall grass requires unique procedures. When landing on such surfaces, the objective is to touch down as smoothly as possible, and at the slowest possible landing speed. The pilot must control the airplane in a manner that the wings support the weight of the airplane as long as practical, to minimize drag and stresses imposed on the landing gear by the rough or soft surface.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper landing flare, which resulted in a hard landing and subsequent landing gear separation and collapse.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Landing flare - Incorrect use/operation
Environmental issues	Soft surface - Effect on equipment

Factual Information

History of Flight

Landing-flare/touchdown	Off-field or emergency landing
Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Part(s) separation from AC
Landing-flare/touchdown	Loss of control on ground
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	62, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; 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; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	June 29, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 4, 2015
Flight Time:	(Estimated) 14000 hours (Total, all aircraft), 4500 hours (Total, this make and model), 13950 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Female
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Rear
Other Aircraft Rating(s):		Restraint Used:	Lap only
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1222V
Model/Series:	U206 F	Aircraft Category:	Airplane
Year of Manufacture:	1974	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	U20602522
Landing Gear Type:	Tricycle	Seats:	5
Date/Type of Last Inspection:	June 6, 2016 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520F
Registered Owner:	Alaska Gulf Coast Adventures	Rated Power:	300 Horsepower
Operator:	Alaska Gulf Coast Adventures	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PACV,31 ft msl	Distance from Accident Site:	26 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	69°
Lowest Cloud Condition:	Few / 1400 ft AGL	Visibility	6 miles
Lowest Ceiling:	Overcast / 2100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	13°C / 12°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	CORDOVA, AK (CDV)	Type of Flight Plan Filed:	None
Destination:	Cordova, 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:	4 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 None	Latitude, Longitude:	60.338333,-146.258056(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Gary V Stears; FAA Juneau FSDO; Juneau , AK
Original Publish Date:	September 12, 2016
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=93652

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](#).