

# **Aviation Investigation Final Report**

Location: Juneau, Alaska Accident Number: GAA19CA233

Date & Time: April 27, 2019, 17:37 Local Registration: N288CH

Aircraft: Aerospatiale AS350 Aircraft Damage: Substantial

**Defining Event:** Miscellaneous/other **Injuries:** 6 None

Flight Conducted Under: Part 135: Air taxi & commuter - Non-scheduled

#### **Analysis**

The pilot reported that, during the second landing on a "ridge" and while dropping off passengers for skiing, the helicopter's tail rotor contacted a higher area of snow-covered terrain.

The helicopter sustained substantial damage to the tailboom and the tail rotor gear box's mounting surface.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter 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 approach to landing on a ridge and his failure to maintain clearance from snow-covered terrain, which resulted in a tail rotor strike.

### Findings

Aircraft Descent/approach/glide path - Not attained/maintained

Personnel issues Task monitoring/vigilance - Pilot

**Environmental issues** Snow/slush/ice covered surface - Effect on operation

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### **Factual Information**

### History of Flight

Landing	Miscellaneous/other (Defining event)
Landing	Collision with terr/obj (non-CFIT)

#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	40,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	February 6, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 2, 2019
Flight Time:	(Estimated) 3707 hours (Total, all aircraft), 1384 hours (Total, this make and model), 3650 hours (Pilot In Command, all aircraft), 91 hours (Last 90 days, all aircraft), 37 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	Aerospatiale	Registration:	N288CH
Model/Series:	AS350 B2	Aircraft Category:	Helicopter
Year of Manufacture:	1990	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2383
Landing Gear Type:	High skid	Seats:	7
Date/Type of Last Inspection:	March 5, 2019 100 hour	Certified Max Gross Wt.:	4961 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	10172.3 Hrs at time of accident	Engine Manufacturer:	Safran
ELT:	C126 installed, not activated	Engine Model/Series:	Ariel 1D1
Registered Owner:	Coastal Helicopters Inc	Rated Power:	732 Horsepower
Operator:	Coastal Helicopters Inc	Operating Certificate(s) Held:	Rotorcraft external load (133), On-demand air taxi (135), Commercial air tour (136), Agricultural aircraft (137)
Operator Does Business As:		Operator Designator Code:	XCHA

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAJN,24 ft msl	Distance from Accident Site:	9 Nautical Miles
Observation Time:	02:53 Local	Direction from Accident Site:	203°
<b>Lowest Cloud Condition:</b>	Few / 6000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.38 inches Hg	Temperature/Dew Point:	14°C / -8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Juneau, AK (PAJN)	Type of Flight Plan Filed:	Company VFR
Destination:	Juneau, AK	Type of Clearance:	Unknown
Departure Time:		Type of Airspace:	Class G

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### **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:	58.491111,-134.455001(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Gutierrez, Eric
Additional Participating Persons:	David Longan ; FAA; Juneau, AK
Original Publish Date:	March 20, 2020
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99346

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.

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