



Aviation Investigation Final Report

Location: Homer, Alaska Accident Number: ANC20CA070

Date & Time: July 16, 2020, 15:14 Local Registration: N1432D

Aircraft: Bell 206L-1 Aircraft Damage: Substantial

Defining Event: Controlled flight into terr/obj (CFIT) **Injuries:** 1 None

Flight Conducted Under: Part 133: Rotorcraft ext. load

Analysis

The pilot reported that, during maneuvering for external load operations to a boat, the helicopter suddenly began to shake violently. He immediately realized the helicopter had struck the boat with the main rotor blades; he jettisoned the 50 ft longline, the skid-based emergency flotation system was activated, and the helicopter landed on the water without further incident.

A post-accident examination revealed that the helicopter had struck the boat's mast and sustained substantial damage to the two main rotor blades.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter that would have precluded normal operation.

The pilot further added, he should have measured the boat mast height prior to operation instead of visually estimating the height and instead used a 100 ft long-line.

Probable Cause and Findings

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

The pilot's failure to see and avoid the boat's mast, which resulted in a main rotor blade strike. Contributing to the accident was the pilot's inadequate preflight planning by not having the boat's mast measured.

Findings

Personnel issues Task monitoring/vigilance - Pilot

Personnel issues (general) - Pilot

Environmental issues Tower/antenna (incl guy wires) - Effect on operation

Page 2 of 6 ANC20CA070

Factual Information

History of Flight

Maneuvering-hover	External load event (Rotorcraft)
Maneuvering-hover	Controlled flight into terr/obj (CFIT) (Defining event)
Maneuvering-hover	Off-field or emergency landing

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	68,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	March 1, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 20, 2019
Flight Time:	(Estimated) 26995 hours (Total, all aircraft), 521 hours (Total, this make and model), 26769 hours (Pilot In Command, all aircraft), 117 hours (Last 90 days, all aircraft), 61 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Page 3 of 6 ANC20CA070

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N1432D
Model/Series:	206L-1	Aircraft Category:	Helicopter
Year of Manufacture:	1982	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	45741
Landing Gear Type:	Float; High skid	Seats:	7
Date/Type of Last Inspection:	May 1, 2020 100 hour	Certified Max Gross Wt.:	4150 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	21432.5 Hrs at time of accident	Engine Manufacturer:	Rolls Royce Allison
ELT:	C126 installed, not activated	Engine Model/Series:	250-C30P
Registered Owner:	Heliotrope Corp	Rated Power:	650 Horsepower
Operator:	EGLI AIR HAUL INC	Operating Certificate(s) Held:	Rotorcraft external load (133)
Operator Does Business As:		Operator Designator Code:	HRPL

Meteorological Information and Flight Plan

meteorological informati	<u> </u>		
Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PASO,29 ft msl	Distance from Accident Site:	56 Nautical Miles
Observation Time:	22:53 Local	Direction from Accident Site:	87°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.73 inches Hg	Temperature/Dew Point:	22°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Augustine Islan, AK (N/A)	Type of Flight Plan Filed:	Company VFR
Destination:	Homer, AK	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Page 4 of 6 ANC20CA070

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	59.400001,-153.516662(est)

Page 5 of 6 ANC20CA070

Administrative Information

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Anthony Mattingly; FAA; Anchorage, AK
Original Publish Date:	August 20, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101627

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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.

Page 6 of 6 ANC20CA070