



National Transportation Safety Board Aviation Accident Final Report

Location:	Homer, AK	Accident Number:	ANC16CA051
Date & Time:	08/04/2016, 1130 AKD	Registration:	N719TF
Aircraft:	ROBINSON HELICOPTER COMPANY R44 II	Aircraft Damage:	Substantial
Defining Event:	Birdstrike	Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The pilot stated that while en route, about 1,000 feet above ground level (agl), a loud sound was heard in conjunction with feeling a "bump." At this point, a vibration was felt in the control pedals and a precautionary landing was executed. Upon inspection, an estimated 3-inch area of the tail rotor blade exhibited signs consistent with buckling.

Witnesses on the ground reported seeing an object consistent with a bird fall from the sky after contact with the helicopter. No panels or other equipment was missing from the helicopter during an inspection following the landing. The pilot reported no pre-impact mechanical malfunctions or anomalies 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:

An in-flight collision with a bird resulting in damage to a tail rotor blade, which required replacement.

Findings

Aircraft	Flight control system - Damaged/degraded (Cause)
Environmental issues	Animal(s)/bird(s) - Effect on equipment (Cause)

Factual Information

History of Flight

Enroute-cruise	Birdstrike (Defining event)
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Pilot Information

Certificate:	Airline Transport	Age:	39, Female
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last FAA Medical Exam:	11/02/2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	10/21/2015
Flight Time:	9600 hours (Total, all aircraft), 85 hours (Total, this make and model), 8130 hours (Pilot In Command, all aircraft), 125 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ROBINSON HELICOPTER COMPANY	Registration:	N719TF
Model/Series:	R44 II	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	10990
Landing Gear Type:	Skid;	Seats:	4
Date/Type of Last Inspection:	07/01/2016, Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	23 Hours	Engines:	1 Reciprocating
Airframe Total Time:	1003 Hours at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540-AE1A5
Registered Owner:	ACE FLYERS INC	Rated Power:	245 hp
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAHO, 73 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	2253 UTC	Direction from Accident Site:	305°
Lowest Cloud Condition:		Visibility	6 Miles
Lowest Ceiling:	Overcast / 4700 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	16°C / 13°C
Precipitation and Obscuration:	Light - Rain; Moderate - Mist		
Departure Point:	HOMER, AK (HOM)	Type of Flight Plan Filed:	
Destination:	HOMER, AK (HOM)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	

Airport Information

Airport:	HOMER (HOM)	Runway Surface Type:	Grass/turf
Airport Elevation:	84 ft	Runway Surface Condition:	Dry
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	59.585278, -151.329444 (est)

Administrative Information

Investigator In Charge (IIC):	David S Williams	Report Date:	12/05/2016
Additional Participating Persons:	Benjamin Herning; FAA; Anchorage, AK		
Publish Date:	12/05/2016		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93650		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).