



# National Transportation Safety Board Aviation Accident Preliminary Report

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<b>Location:</b>	Kalapana, HI	<b>Accident Number:</b>	ANC20LA028
<b>Date &amp; Time:</b>	03/05/2020, 1130 HST	<b>Registration:</b>	N11QK
<b>Aircraft:</b>	Eurocopter EC130	<b>Injuries:</b>	2 Minor, 4 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled - Sightseeing		

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On March 5, 2020, about 1130 Hawaii standard time, a Airbus EC130 B4 helicopter, N11QK, was substantially damaged when it was involved in an accident, about 6 miles north of Kalapana, Hawaii. Of the six occupants on board, the commercial pilot and three passengers were uninjured, and two passengers sustained minor injuries. The helicopter was operated as a Title 14 Code of Federal Regulations Part 135 flight.

According to the pilot, the accident helicopter was the second of two commercial air tour helicopters departing Hilo International Airport (PHTO). After departure, they flew in a southerly direction and remained slightly offshore for a short time before turning west along the shoreline. The two helicopters proceeded to a geographic area known as the "Old Ocean Entry." As the helicopter passed over the shoreline, the pilot noticed a significant, high frequency airframe vibration. He said that as soon as the vibration started, the tail rotor chip annunciator light briefly illuminated, and as the vibration continued, the tail rotor chip light "flickered." The vibration and noise stopped after a few seconds and the chip light extinguished. He selected a large open area as a precautionary landing site and slowed the helicopter on the approach. As the helicopter slowed, he raised the collective, and applied right tail rotor pedal, but the nose of the helicopter veered to the left. The pilot noted that he eventually applied full right tail rotor pedal, but the nose of the helicopter continued to the left. At about 200 feet above ground level, with the right tail rotor pedal fully depressed, the helicopter began to spin to the left. In an effort to stop the spin, he attempted to gain forward airspeed, but eventually closed the engine throttle and preformed a hovering autorotation. He said the helicopter descended, touched down hard, and subsequently rolled on its right side, sustaining substantial damage to the fuselage, tail boom, and the main rotor drive system.

A National Transportation Safety Board (NTSB) postaccident examination of the helicopter revealed that one of the ten tail rotor fenestron blades fractured at the blade root, and it subsequently deflected off the fenestron drive shaft, creating an imbalance, which was followed by the failure of the drive shaft. The tail rotor chip detector cannon plug was found to have an intermittent connection, and an inspection of the tail rotor gearbox magnetic drain plug revealed very small metallic particles. All ten tail rotor fenestron blades have been retained and shipped to the NTSB's Materials Laboratory for further examination.

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Eurocopter	<b>Registration:</b>	N11QK
<b>Model/Series:</b>	EC130 B4	<b>Aircraft Category:</b>	Helicopter
<b>Amateur Built:</b>	No		
<b>Operator:</b>	Helicopter Consultanats of Maui LLC	<b>Operating Certificate(s) Held:</b>	Commercial Air Tour (136); Agricultural Aircraft (137); Rotorcraft External Load (133); On-demand Air Taxi (135)
<b>Operator Does Business As:</b>	Blue Hawaiian Helicopters	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	PHTO	<b>Observation Time:</b>	2153 UTC
<b>Distance from Accident Site:</b>	18 Nautical Miles	<b>Temperature/Dew Point:</b>	26° C / 18° C
<b>Lowest Cloud Condition:</b>	Few / 2500 ft agl	<b>Wind Speed/Gusts, Direction:</b>	6 knots / , 80°
<b>Lowest Ceiling:</b>	Overcast / 3800 ft agl	<b>Visibility:</b>	10 Miles
<b>Altimeter Setting:</b>	30.07 inches Hg	<b>Type of Flight Plan Filed:</b>	None
<b>Departure Point:</b>	Kalapana, HI	<b>Destination:</b>	Kalapana, HI

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	2 Minor, 3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor, 4 None	<b>Latitude, Longitude:</b>	19.438611, -155.000000 (est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	David B Banning
<b>Additional Participating Persons:</b>	John Chicosky; Blue Hawaiian Helicopters; Hilo, HI Eric Hamp; Blue Hawaiian Helicopters; Hilo, HI Leonard T Spencer; Federal Aviation Administration; Honolulu, HI
<b>Note:</b>	The NTSB did not travel to the scene of this accident.