



Aviation Investigation Final Report

Location:	Covelo, California	Accident Number:	WPR22LA031
Date & Time:	October 28, 2021, 12:00 Local	Registration:	N27TK
Aircraft:	Bell 206L-3	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

The pilot of the helicopter reported that, he was conducting a local area photography/video flight with passengers. Before departure he had removed the doors and provided a preflight safety briefing, which included briefing his passengers on securing their belongings. While in cruise flight, a passenger's jacked departed the helicopter and became lodged on the synchronized elevator. The pilot simultaneously felt an impact and noted resistance against the cyclic control. A precautionary landing was made without further incident. The tail rotor drive shaft was substantially damaged.

The pilot reported no preaccident mechanical malfunctions or failures 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:

A passenger's unsecured object departed the cabin resulted in a collision with the tail rotor drive shaft.

Findings

Personnel issues	Understanding/comprehension - Passenger
Environmental issues	Debris/dirt/foreign object - Contributed to outcome

Factual Information

History of Flight

Enroute	Cabin safety event
Enroute-cruise	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor; Private	Age:	29, 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	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 20, 2021
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 22, 2021
Flight Time:	1701 hours (Total, all aircraft), 87 hours (Total, this make and model), 88 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	4-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
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:	Right
Other Aircraft Rating(s):		Restraint Used:	4-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
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:	Left
Other Aircraft Rating(s):		Restraint Used:	4-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N27TK
Model/Series:	206L-3 NO SERIES	Aircraft Category:	Helicopter
Year of Manufacture:	1985	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51138
Landing Gear Type:	None; Skid	Seats:	7
Date/Type of Last Inspection:	July 8, 2021 Annual	Certified Max Gross Wt.:	4150 lbs
Time Since Last Inspection:	45.4 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	14046 Hrs at time of accident	Engine Manufacturer:	Rolls Royce
ELT:	C126 installed, not activated	Engine Model/Series:	C250-030P
Registered Owner:	NATIONAL ROTORCRAFT LLC	Rated Power:	650 Horsepower
Operator:	Helico Sonoma Inc.	Operating Certificate(s) Held:	Rotorcraft external load (133), On-demand air taxi (135), Commercial air tour (136), Certificate of authorization or waiver (COA)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KUKI,626 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	11:56 Local	Direction from Accident Site:	176°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.18 inches Hg	Temperature/Dew Point:	19°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ukiah, CA (UKI)	Type of Flight Plan Filed:	Company VFR
Destination:	Ukiah, CA (UKI)	Type of Clearance:	None
Departure Time:	11:40 Local	Type of Airspace:	Class E

Airport Information

Airport:	UKIAH MUNI UKI	Runway Surface Type:	
Airport Elevation:	616 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	39.7905,-123.26633(est)

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	Dennis Thorpe; Federal Aviation Administration; Oakland, CA
Original Publish Date:	May 4, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=104227

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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](#).