



Aviation Investigation Final Report

Location:	Estacada, Oregon	Accident Number:	WPR24LA036
Date & Time:	November 15, 2023, 07:45 Local	Registration:	N103WC
Aircraft:	Bell OH-58A	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 None
Flight Conducted Under:	Part 133: Rotorcraft ext. load		

Analysis

The pilot reported that he was relocating bundles of trees from the harvest field onto a truck bed. Approximately 30 minutes into the operation, the load hook did not immediately release when he was setting a bundle down. The pilot pressed the release button multiple times, as he had done in similar situations in the past. The helicopter's momentum, as it moved back towards the field, caused the bundle to slide a few feet. One of the main rotor blades then struck the tail boom, and the other blade flapped down, cutting off the rear section of the tail boom, vertical stabilizer, and tail rotor. The helicopter spun several times before landing, resting flat on the skids. The landing impact was forceful enough to break the mast and dislodge the main transmission. The helicopter sustained substantial damage to the main rotor, tail boom, vertical stabilizer, tail rotor, and transmission. The pilot reported that there were no preaccident mechanical malfunctions or failures with the helicopter that would have precluded normal operations.

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 helicopter control during an external load operation, which resulted in the helicopter's main rotor blades impacting the tail boom.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	(general) - Not attained/maintained

Factual Information

History of Flight

Maneuvering-hover	External load event (Rotorcraft)
Maneuvering-hover	Loss of control in flight (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	47,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 2 Without waivers/limitations	Last FAA Medical Exam:	April 19, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 1, 2023
Flight Time:	1858 hours (Total, all aircraft), 591 hours (Total, this make and model), 1774 hours (Pilot In Command, all aircraft), 116 hours (Last 90 days, all aircraft), 91 hours (Last 30 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N103WC
Model/Series:	OH-58A	Aircraft Category:	Helicopter
Year of Manufacture:	1969	Amateur Built:	
Airworthiness Certificate:	Normal; Restricted (Special)	Serial Number:	69-16083
Landing Gear Type:	High skid	Seats:	4
Date/Type of Last Inspection:	November 12, 2023 100 hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	19 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	9087 Hrs at time of accident	Engine Manufacturer:	Rolls Royce
ELT:	Not installed	Engine Model/Series:	T63-A-720
Registered Owner:	EDGEFIELD AVIATION LLC	Rated Power:	400 Horsepower
Operator:	EDGEFIELD AVIATION LLC	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dawn
Observation Facility, Elevation:	KUAO, 196 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	07:53 Local	Direction from Accident Site:	266°
Lowest Cloud Condition:		Visibility	2.5 miles
Lowest Ceiling:	Broken / 700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	8°C / 7°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Estacada, OR	Type of Flight Plan Filed:	None
Destination:	Estacada, OR	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	45.265907,-122.35522

Administrative Information

Investigator In Charge (IIC):	Rho, Paul
Additional Participating Persons:	Greg Howard; Federal Aviation Administration; Portland, OR
Original Publish Date:	June 6, 2024
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=193390

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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](#).