



National Transportation Safety Board Aviation Accident Final Report

Location:	Cypress Island, Washington	Accident Number:	GAA19CA509
Date & Time:	August 19, 2019, 19:30 Local	Registration:	N7186P
Aircraft:	Robinson R44	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 Serious, 2 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

The pilot reported that he began a right orbit off the shore of an island about 20 ft above the water. During the maneuver, the helicopter drifted and struck a tree leaning over the water. The helicopter subsequently lost altitude, impacted the water, and came to rest on its right side. The helicopter sustained substantial damage to the main rotor blades and fuselage. The pilot reported that there were no preaccident 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:

The pilot's failure to maintain adequate clearance from a tree while maneuvering at a low altitude.

Findings

Aircraft	Altitude - Not attained/maintained
Personnel issues	Monitoring environment - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Low altitude operation/event (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	73,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-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 multi-engine; Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	April 22, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 11000 hours (Total, all aircraft), 1500 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N7186P
Model/Series:	R44 Undesignat	Aircraft Category:	Helicopter
Year of Manufacture:	1999	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0611
Landing Gear Type:	N/A; Skid	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-540-F1B5
Registered Owner:		Rated Power:	235 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KORS, 31 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	02:35 Local	Direction from Accident Site:	308°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.86 inches Hg	Temperature/Dew Point:	20° C / 13° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious, 1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 Minor	Latitude, Longitude:	48.608333, -122.71611 (est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar	Report Date:	
Additional Participating Persons:			
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100133		

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](#).