



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Christmas Valley, Oregon	Accident Number:	WPR22LA182
Date & Time:	May 18, 2022, 17:33 Local	Registration:	N851AL
Aircraft:	Airbus Helicopters AS 350B3	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	4 Serious
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Unspecified)		

Analysis

According to the accident pilot, after transferring a patient from Klamath Falls, Oregon to Bend, Oregon, he received a request from his dispatch to collect a patient in Christmas Valley, Oregon. He reviewed weather information from stations surrounding the destination as there was no local weather reporting facility at the destination. The pilot recalled that the expected winds were from the northwest at 15-20 kts sustained, and gusting to 30 kts, but were acceptable for the flight. After a preflight inspection he departed on the accident flight with three flight crewmembers. They did not experience any significant weather while enroute to their destination and the helicopter was operating within its normal limitations. The pilot approached the airport by entering the airport traffic pattern from the north for a landing to the west as the winds were from the west/northwest. He recalled that the windspeeds at the time of arrival were approximately 15-20 kts and gusting between 25-30 kts.

After he became established on final approach he sidestepped and approached a parallel taxiway. He slowly taxied while looking for the air ambulance they were scheduled to meet. The pilot reported that he was monitoring the windsock during this time, but observed the helicopter handling well with no indication of winds that would exceed the helicopter's limitations at the time. Once he identified the landing site he lined the helicopter with the landing pad and began a descent while noting several structures nearby that were providing protection from the wind. At this point he performed a right pedal turn from about 3 ft above ground level to position the left door towards the ambulance for the pickup, consistent with the operator's protocol. The pedal turn went smoothly; however, as the helicopter touched down it was forced forward rapidly. The pilot reacted by increasing collective and applying aft cyclic to climb the helicopter and avoid surrounding hazards. He lowered collective when the helicopter was about 30 ft above ground level and held aft cyclic, but the helicopter began to spin to the left and he was unable to control the helicopter. The pilot then reduced power to IDLE using the throttle twist grip and could not recount anything further.

The pilot reported no preimpact mechanical anomalies or malfunctions with the helicopter that would have precluded normal operation. He opined that he encountered a hard wind from the rear.

A witness estimated that the wind was about 50 mph (43 kts) at the time of the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot’s inability to maintain control in high wind conditions while repositioning during a landing attempt, which resulted in a loss of control and collision with terrain.

Findings

Aircraft	(general) - Attain/maintain not possible
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing	Loss of control in flight (Defining event)
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Pilot Information

Certificate:	Commercial	Age:	40, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	August 23, 2021
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 28, 2022
Flight Time:	2083 hours (Total, all aircraft), 15 hours (Total, this make and model), 1806 hours (Pilot In Command, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Airbus Helicopters	Registration:	N851AL
Model/Series:	AS 350B3	Aircraft Category:	Helicopter
Year of Manufacture:	2019	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	8647
Landing Gear Type:	None; High skid	Seats:	4
Date/Type of Last Inspection:	May 17, 2022 AAIP	Certified Max Gross Wt.:	5225 lbs
Time Since Last Inspection:	411 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	1074 Hrs as of last inspection	Engine Manufacturer:	Safran
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	Arriel 2D
Registered Owner:	TVPX AIRCRAFT SOLUTIONS INC TRUSTEE	Rated Power:	728 Horsepower
Operator:	Med-Trans	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Airlink critical care transport	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KBDN, 3462 ft msl	Distance from Accident Site:	57 Nautical Miles
Observation Time:	17:29 Local	Direction from Accident Site:	336°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	18 knots / 25 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	17°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bend, OR (54OR)	Type of Flight Plan Filed:	Company VFR
Destination:	Christmas Valley, OR	Type of Clearance:	None
Departure Time:	16:53 Local	Type of Airspace:	Class G

Airport Information

Airport:	Christmas Valley Airport 62S	Runway Surface Type:	Asphalt
Airport Elevation:	4320 ft msl	Runway Surface Condition:	Dry
Runway Used:	07/25	IFR Approach:	None
Runway Length/Width:	5200 ft / 60 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	4 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	4 Serious	Latitude, Longitude:	43.23625,-120.66469(est)

Administrative Information

Investigator In Charge (IIC):	Stein, Stephen
Additional Participating Persons:	Erik Ramseyer; Federal Aviation Administration; Portland, OR
Original Publish Date:	August 16, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=105103

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).