

Aviation Investigation Final Report

Location:	Brewster, Washington	Accident Number:	WPR19LA168
Date & Time:	May 28, 2019, 17:10 Local	Registration:	N955TC
Aircraft:	Sikorsky UH19	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot-in-command (PIC) was evaluating another pilot as a new job applicant. While the applicant-pilot was manipulating the helicopter controls, the PIC heard a "bang" and noted an overspeed indication on the tachometer. He subsequently took control of the helicopter and performed an autorotation that resulted in a hard landing, which substantially damaged the helicopter. The Federal Aviation Administration and operator surmised that the main drive line system clutch and torque converter failed, which resulted in the engine overspeed. However, the operator did not respond to investigators or submit a NTSB Form 6120.1, Pilot/Operator Aircraft Accident Incident Report, nor was a follow-up examination of the helicopter able to be scheduled and performed by the NTSB investigator. Due to the operator's lack of cooperation during the investigation, the NTSB investigator was unable to definitively determine the cause of the accident.

Probable Cause and Findings

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

A reported mechanical malfunction and a hard landing for reasons that could not be determined based on available evidence.

Findings

Not determined

(general) - Unknown/Not determined

Factual Information

History of Flight	
Maneuvering-low-alt flying	Unknown or undetermined
Autorotation	Hard landing (Defining event)

On May 28, 2019, about 1710 Pacific daylight time, a Sikorsky UH-19D helicopter, N955TC, was substantially damaged when it was involved in an accident near Brewster, Washington. One pilot received minor injuries, while the second pilot was uninjured. The helicopter was operated under the provisions of Title 14 *Code of Federal Regulations* Part 91 as an evaluation flight.

The day after the accident, Federal Aviation Administration (FAA) inspectors interviewed the pilot-in-command (PIC) who informed the inspectors that the purpose of the flight was to evaluate the other pilot as a "new job applicant" for cherry drying flights. The applicant-pilot was flying the helicopter when the PIC heard a "bang", observed the over-speed on the tachometer and saw the "applicant-pilot" frozen on the controls. The PIC took over the controls and executed an autorotation from about 20-50 ft agl. The helicopter subsequently landed hard, separating the tailboom from the fuselage and collapsing the landing gear, which resulted in substantial damage. The applicant-pilot was uninjured but remained in the hospital and was discharged the next day with no forwarding address or phone number. The FAA inspectors and the operator surmised that the main drive line system clutch and torque converter failed, which resulted in the engine over-speed.

The NTSB investigator attempted to contact the operator to discuss future examination of the helicopter and to obtain the NTSB Pilot/Operator Aircraft Accident/Incident Report Form 6120.1. However, all attempts to contact the operator were unsuccessful, and the proposed follow-up examination of the helicopter by the NTSB was not performed.

Pilot Information

Certificate:	Commercial	Age:	48,Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2	Last FAA Medical Exam:	June 9, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

Co-pilot Information

Certificate:	Commercial	Age:	Male
Airplane Rating(s):		Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	
Medical Certification:	Class 2	Last FAA Medical Exam:	July 6, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Sikorsky	Registration:	N955TC
Model/Series:	UH19 D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	57-5961
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	July 12, 2018 Annual	Certified Max Gross Wt.:	7198 lbs
Time Since Last Inspection:		Engines:	1
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOMK,1300 ft msl	Distance from Accident Site:	
Observation Time:	17:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.84 inches Hg	Temperature/Dew Point:	28.9°C / 3.9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brewster, WA	Type of Flight Plan Filed:	None
Destination:	Brewster, WA	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	48.149604,-119.82086(est)

Administrative Information

Investigator In Charge (IIC):	Smith, Maja
Additional Participating Persons:	Christopher Lang; FAA; Spokane, WA
Original Publish Date:	February 9, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=99595

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 <u>here</u>.