



National Transportation Safety Board Aviation Accident Final Report

Location:	Shamokin, PA	Accident Number:	GAA19CA514
Date & Time:	08/25/2019, 0945 EDT	Registration:	N653CH
Aircraft:	Hughes 269A	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The helicopter pilot reported that he was being evaluated for a pilot position with a perspective employer, who was an airplane pilot-rated passenger and occupied the right front seat. He was asked to perform an autorotation as part of the evaluation, and while entering the autorotation, he noticed that the rotor and engine needles were split and that the engine tachometer indicated 0 rpm. He believed that the engine had failed. The pilot maintained the rotor rpm in the green and entered a flare about 40 ft above ground level. He attempted to cushion the landing, but the helicopter landed hard. The pilot reported that he could not hear if the engine was running during the flight because he was wearing a noise-canceling headset.

The helicopter sustained substantial damage to the horizontal airframe tube cross-member.

During postaccident examination of the helicopter, the throttle linkage functioned normally. All spark plugs were removed and examined and exhibited indications of normal combustion. A fuel sample was obtained through the sump valve, and no water or particulate contamination was found. No evidence of any preaccident mechanical malfunctions or failures were found 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 improper landing flare during an autorotation, which resulted in a hard landing. Contributing to the accident was a loss of engine power for reasons that could not be determined because postaccident examination revealed no evidence of any preaccident mechanical malfunctions or failures with the helicopter that would have precluded normal operation.

Findings

Aircraft

Personnel issues

Aircraft control - Pilot (Cause)

Not determined

Not determined - Unknown/Not determined (Factor)

Factual Information

History of Flight

Autorotation	Hard landing (Defining event)
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Pilot Information

Certificate:	Flight Instructor; Commercial; Private	Age:	27, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last FAA Medical Exam:	11/09/2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	08/25/2018
Flight Time:	(Estimated) 378 hours (Total, all aircraft), 4 hours (Total, this make and model), 311 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N653CH
Model/Series:	269A No Series	Aircraft Category:	Helicopter
Year of Manufacture:	1965	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	96-0653
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	HIO-360
Registered Owner:	Kelley Aviation Consultants Llc	Rated Power:	180 hp
Operator:	Kelley Aviation Consultants Llc	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KSEG, 450 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	1253 UTC	Direction from Accident Site:	266°
Lowest Cloud Condition:	Few / 7500 ft agl	Visibility	10 Miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.31 inches Hg	Temperature/Dew Point:	17°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Shamokin, PA (N79)	Type of Flight Plan Filed:	None
Destination:	Shamokin, PA (N79)	Type of Clearance:	None
Departure Time:	0900 EDT	Type of Airspace:	Class G

Airport Information

Airport:	Northumberland County (N79)	Runway Surface Type:	Asphalt
Airport Elevation:	880 ft	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	3297 ft / 75 ft	VFR Approach/Landing:	Forced Landing; Simulated Forced Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	40.836944, -76.552500 (est)

Administrative Information

Investigator In Charge (IIC):	Michael A Hicks	Report Date:	03/17/2020
Additional Participating Persons:	Bill Haase; FAA; Harrisburg, PA		
Publish Date:	03/17/2020		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=100158		

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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](#).