



Aviation Investigation Final Report

Location:	Northway, Alaska	Accident Number:	GAA19CA345
Date & Time:	June 10, 2019, 11:46 Local	Registration:	N64771
Aircraft:	S M & T Aircraft UH	Aircraft Damage:	Substantial
Defining Event:	Settling with power/vortex ring state	Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

The helicopter pilot reported that he and the safety pilot were delivering fuel to a remote camp. During short final with the safety pilot on the controls and while the helicopter was about 50 ft above ground level, the descent rate increased. The safety pilot raised the collective, but the helicopter continued to descend, and the main rotor rpm began to decay. The helicopter then yawed right, rolled left, and impacted terrain. The helicopter sustained substantial damage to the fuselage and main rotor blades. The helicopter pilot reported that there were no preaccident mechanical failures or malfunctions 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 a proper descent rate during landing, which resulted in impact with terrain.

Findings

Aircraft	Descent rate - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing	Settling with power/vortex ring state (Defining event)
----------------	--

Pilot Information

Certificate:	Commercial; Remote	Age:	34, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter; Unmanned (sUAS)	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	February 1, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 2000 hours (Total, all aircraft), 8 hours (Total, this make and model)		

Check pilot Information

Certificate:	Commercial	Age:	58, Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	None With waivers/limitations	Last FAA Medical Exam:	January 16, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 110314 hours (Total, all aircraft), 297 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	S M & T Aircraft	Registration:	N64771
Model/Series:	UH 1B	Aircraft Category:	Helicopter
Year of Manufacture:	1963	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	63-8704
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	April 4, 2019 100 hour	Certified Max Gross Wt.:	8500 lbs
Time Since Last Inspection:		Engines:	Turbo shaft
Airframe Total Time:	7414 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	T53-L-11D
Registered Owner:	Evermore Aviation LLC	Rated Power:	1100 Horsepower
Operator:	Aurora Aviation Services, Inc	Operating Certificate(s) Held:	Rotorcraft external load (133)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAOR,1713 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	256°
Lowest Cloud Condition:	Clear	Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	VFR/IFR
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	63.075832,-141.038894

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Andy Noble; FAA; Fairbanks, AK
Original Publish Date:	April 13, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99642

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](#).