

Aviation Investigation Final Report

Location: JUNEAU, Alaska Accident Number: ANC99LA092

Date & Time: July 15, 1999, 13:00 Local Registration: N8926F

Aircraft: Hughes 269A Aircraft Damage: Substantial

Defining Event: 2 Minor

Flight Conducted Under: Part 91: General aviation

Analysis

The certificated commercial pilot said that he made a northerly approach to a 3,400 feet msl mountain top heliport. He said that as he approached his intended landing site, he increased collective pitch while slowing his approach airspeed, and the rotor rpm began to decay. The pilot stated that he was forced to hover over, and eventually touchdown on, an area of uneven terrain, about thirty feet short and downhill from his intended landing site. He said, in part: 'I was able to keep the toes of the skids on the uphill slope while trying to get my rpm back up. I rolled the throttle on and lowered the collective as much as I dared.' He said that in an attempt to reposition the helicopter, he increased collective pitch and applied left pedal input. The left skid impacted the ground, and the helicopter rolled over. The helicopter sustained substantial damage to the rotor system, fuselage, and tail boom. The pilot reported that weather conditions at the time of the accident consisted of clear skies, visibility unlimited, gusty winds from the southeast at 10 to 15 knots, and temperature about 70 degrees F.

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 rotor rpm, and an inadequately planned approach. A factor associated with the accident was a tailwind.

Findings

Occurrence #1: UNDERSHOOT Phase of Operation: APPROACH

Findings

1. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

2. (C) PLANNED APPROACH - INADEQUATE - PILOT IN COMMAND

3. (F) WEATHER CONDITION - TAILWIND

Occurrence #2: ABRUPT MANEUVER

Phase of Operation: HOVER - IN GROUND EFFECT

Occurrence #3: ROLL OVER

Phase of Operation: HOVER - IN GROUND EFFECT

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Factual Information

On July 15, 1999, about 1300 Alaska daylight time, a skid equipped Hughes 269A helicopter, N8926F, sustained substantial damage during landing atop a 3,400 feet msl mountain, about 12 miles southwest of Juneau, Alaska. The helicopter was being operated as a visual flight rules (VFR) business flight under Title 14, CFR Part 91, when the accident occurred. The helicopter is owned and operated by Color-Vue Inc., Juneau, Alaska. The commercial pilot, and the one passenger aboard, received minor injuries. Visual meteorological conditions prevailed, and a VFR flight plan was in effect. The flight originated about 1245 from Juneau.

During a telephone conversation with the National Transportation Safety Board investigator-incharge on July 16, the pilot reported that the accident helicopter was being utilized to transport a service technician to a remote radio repeater site. He said that he made a northerly approach to the mountain top. He said that as he approached his intended landing site, he increased collective pitch while slowing his approach airspeed, and the rotor rpm began to decay. The pilot stated that he was forced to hover over, and eventually touchdown on, an area of uneven terrain, about thirty feet short and downhill from his intended landing site. He said, in part: "I was able to keep the toes of the skids on the uphill slope while trying to get my rpm back up. I rolled the throttle on and lowered the collective as much as I dared." He said that in an attempt to reposition the helicopter, he increased collective pitch and applied left pedal input. The left skid impacted the ground, and the helicopter rolled over. The pilot noted that there were no preaccident mechanical anomalies with the helicopter.

The helicopter sustained substantial damage to the rotor system, fuselage, and tail boom.

The pilot reported that weather conditions at the time of the accident consisted of clear skies, visibility unlimited, gusty winds from the southeast at 10 to 15 knots, and temperature about 70 degrees F.

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Pilot Information

Certificate:	Commercial	Age:	53,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 1, 1999
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	16000 hours (Total, all aircraft), 700 hours (Total, this make and model), 167 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Pogiatration:	N8926F
All Craft Make.	nuglies	Registration:	100920F
Model/Series:	269A 269A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	93-0293
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	October 1, 1998 Annual	Certified Max Gross Wt.:	1575 lbs
Time Since Last Inspection:	54 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4254 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	HIO-360
Registered Owner:	COLOR-VUE, INC.	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	100 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	, AK (JNU)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	58.579811,-134.769973(est)

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Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date:

August 3, 2000

Last Revision Date:

Investigation Class:

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=46865

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.

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