

Aviation Investigation Final Report

Location: Slidell, Louisiana Accident Number: DFW07CA146

Date & Time: June 28, 2007, 10:30 Local Registration: N292B

Aircraft: Schweizer 269C Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Aerial observation

Analysis

The single-engine helicopter encountered a settling with power condition resulting in a hard landing on a marsh. The 3,300-hour commercial pilot was hovering the helicopter at approximately 100 feet above the ground (AGL) while performing a wildlife/mapping survey, approximately 100 feet above ground level (AGL), when he lost control of the helicopter. The helicopter's tail-boom separated and the main rotor blades impacted the ground during the hard landing. The helicopter came to rest in the upright position with the nose pointing skyward. The pilot was able to exit the helicopter unassisted. The pilot reported that he had a 15 knot tailwind, when he slowed the helicopter to mark a waypoint. As he applied left torque pedal and added collective, the main rotor RPM drooped. The pilot was unable to recover sufficient rotor RPM to prevent ground contact. The pilot further stated that there were no malfunctions with the helicopter's engine or controls. Visual metrological conditions prevailed at the time of the accident and the temperature was reported as 85-degrees Fahrenheit.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's encounter with settling with power condition while hovering out of ground effect. A contributing factor was the prevailing tailwind.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: HOVER - OUT OF GROUND EFFECT

Findings

- 1. WEATHER CONDITION HIGH WIND
- 2. ROTOR RPM LOW PILOT IN COMMAND
- 3. (F) WEATHER CONDITION TAILWIND
- 4. (C) SETTLING WITH POWER ENCOUNTERED PILOT IN COMMAND

Occurrence #2: HARD LANDING

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - SWAMPY

Page 2 of 6 DFW07CA146

Factual Information

The single-engine helicopter encountered a settling with power condition resulting in a hard landing on a marsh. The 3,300-hour commercial pilot was hovering the helicopter at approximately 100 feet above the ground (AGL) while performing a wildlife/mapping survey, approximately 100 feet above ground level (AGL), when he lost control of the helicopter. The helicopter's tail-boom separated and the main rotor blades impacted the ground during the hard landing. The helicopter came to rest in the upright position with the nose pointing skyward. The pilot was able to exit the helicopter unassisted. The pilot reported that he had a 15 knot tailwind, when he slowed the helicopter to mark a waypoint. As he applied left torque pedal and added collective, the main rotor RPM drooped. The pilot was unable to recover sufficient rotor RPM to prevent ground contact. The pilot further stated that there were no malfunctions with the helicopter's reciprocating engine or controls. Visual metrological conditions prevailed at the time of the accident and the temperature was reported as 85-degrees Fahrenheit.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	44,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	November 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 1, 2007
Flight Time:	3400 hours (Total, all aircraft), 3200 hours (Total, this make and model), 3000 hours (Pilot In Command, all aircraft), 88 hours (Last 90 days, all aircraft), 54 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

Page 3 of 6 DFW07CA146

Aircraft and Owner/Operator Information

Schweizer	Registration:	N292B
269C	Aircraft Category:	Helicopter
	Amateur Built:	
Normal	Serial Number:	1385
Skid	Seats:	2
June 1, 2007 100 hour	Certified Max Gross Wt.:	2050 lbs
	Engines:	1 Reciprocating
6120 Hrs at time of accident	Engine Manufacturer:	Lycoming
Installed, not activated	Engine Model/Series:	HIO-360
Valley Helicopter Services, LLC	Rated Power:	190 Horsepower
	Operating Certificate(s) Held:	None
	269C Normal Skid June 1, 2007 100 hour 6120 Hrs at time of accident Installed, not activated	Aircraft Category: Amateur Built: Normal Serial Number: Skid Seats: June 1, 2007 100 hour Certified Max Gross Wt.: Engines: 6120 Hrs at time of accident Installed, not activated Valley Helicopter Services, LLC Rated Power: Operating Certificate(s)

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:	Scattered	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Slidell, LA	Type of Flight Plan Filed:	None
Destination:	Slidell, LA	Type of Clearance:	None
Departure Time:	09:15 Local	Type of Airspace:	

Page 4 of 6 DFW07CA146

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:	30.167222,-89.65583

Page 5 of 6 DFW07CA146

Administrative Information

Investigator In Charge (IIC):	LeBaron, Timothy
Additional Participating Persons:	Bruce Watts; Baton Rouge, Louisiana; Baton Rouge, LA
Original Publish Date:	July 25, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=66113

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.

Page 6 of 6 DFW07CA146