

Aviation Investigation Final Report

Location: Panama City, Florida **Accident Number:** ERA09CA120

Date & Time: December 31, 2008, 12:30 Local Registration: N36254

Aircraft: Schweizer 269C Aircraft Damage: Substantial

Defining Event: Collision with terr/obj (non-CFIT) **Injuries:** 3 None

Flight Conducted Under: Part 91: General aviation - Other work use

Analysis

The pilot of a Schweizer 269C helicopter was conducting a non-revenue sightseeing flight, looking for alligators, and he entered an out-of-ground-effect hover at 50-70 feet above ground level. He hovered the helicopter into the wind, which he based on the water conditions. After hovering for about 5 seconds, the pilot pitched forward on the cyclic and raised collective. The helicopter then entered an uncommanded right yaw. The pilot immediately lowered the collective, applied forward cyclic and left anti-torque pedal; however the yaw continued. The helicopter completed at least eight 360-degree turns to the right as he leveled the helicopter and raised the collective. The helicopter subsequently landed in the about 2 feet of water and came to rest upright, without injuries or damage to any property. The pilot believed he experienced a loss of tail rotor authority, and he did not feel any vibration in the anti-torque pedals. He remarked that the nearby trees could have changed the wind direction. The reported wind near the accident site, about the time of the accident, was from 310 degrees at 7 knots. Postaccident examination of the helicopter did not reveal any preimpact mechanical malfunctions.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's encounter with a loss of tail rotor effectiveness during an out-of-ground-effect hover.

Findings

Aircraft

Yaw control - Capability exceeded

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Factual Information

History of Flight

Maneuvering-hover	Loss of tail rotor effectiveness
Uncontrolled descent	Collision with terr/obj (non-CFIT) (Defining event)

Pilot Information

Certificate:	Commercial; Private	Age:	49,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	June 17, 2008
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 10, 2008
Flight Time:	534 hours (Total, all aircraft), 211 hours (Total, this make and model), 402 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Schweizer	Registration:	N36254
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1186
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2050 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	HIO-360
Registered Owner:	EMERALD COAST HELICOPTERS LLC	Rated Power:	190 Horsepower
Operator:	EMERALD COAST HELICOPTERS LLC	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site: Visual (VMC) Condition of Light: Day Observation Facility, Elevation: PFN,20 ft msl Distance from Accident Site: 6 Nautical Miles Observation Time: 11:53 Local Direction from Accident Site: 359°
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Observation Time: 11:53 ocal Direction from Accident Site: 350°
Discretation Time. 11.55 Local Direction Holl Accident Site. 559
Lowest Cloud Condition: Clear Visibility 10 miles
Lowest Ceiling: None Visibility (RVR):
Wind Speed/Gusts: 7 knots / Turbulence Type / Forecast/Actual:
Wind Direction: 310° Turbulence Severity / Forecast/Actual:
Altimeter Setting: 30.04 inches Hg Temperature/Dew Point: 19°C / 7°C
Precipitation and Obscuration: No Obscuration; No Precipitation
Departure Point: Panama City, FL (0FD1) Type of Flight Plan Filed: None
Destination: Panama City, FL (0FD1) Type of Clearance: None

Airport Information

Airport:	Panhandle Helicopter Heliport 0FD1	Runway Surface Type:	
Airport Elevation:	20 ft msl	Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	30.109722,-85.71389

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Administrative Information

Investigator In Charge (IIC):	Etcher, Shawn
Additional Participating Persons:	Charles W Carlisle; FAA/FSDO; Birmingham, AL
Original Publish Date:	February 25, 2009
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=73173

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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