



Aviation Investigation Final Report

Location: HERNANDO, Mississippi Accident Number: ATL99TA126

Date & Time: September 7, 1999, 11:30 Local Registration: N584SD

Aircraft: Hughes OH-6A Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The pilot, a volunteer with the sheriff's department, was conducting proficiency training when the accident occurred. According to the pilot, he had completed three approaches and was on the fourth approach when he encountered a dust devil along the approach path. After encountering the dust devil, when several feet above the ground, the helicopter yawed to the right. In an effort to recover from the yawed condition, the pilot instantly rolled off the throttle control, and the helicopter collided with the ground. No mechanical problems were reported with the helicopter by the pilot. The post-accident examination of the helicopter also did not disclose any mechanical problem.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The in-flight encounter with weather that resulted in the loss of tail rotor control. The pilot failed to maintain directional control and the helicopter collided with the ground.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) WEATHER CONDITION - DUST DEVIL/WHIRLWIND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

Page 2 of 6 ATL99TA126

Factual Information

On September 7, 1999, at 1130 central daylight time, a Hughes OH6A, N584SD, collided with the ground while on approach to a helipad in Hernando, Mississippi. The helicopter was operated by the Desoto County Sheriff's Department under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The helicopter sustained substantial damage. The private pilot was not injured. The public use flight departed Hernando, Mississippi, at 1110.

The pilot, a volunteer with the sheriff's department, was conducting proficiency training when the accident occurred. According to the pilot, he had completed three approaches and was on the fourth approach when he encountered a dust devil along the approach path. After encountering the dust devil, several feet above the ground, the pilot reported that the helicopter yawed to the right. In an effort to recover from the yaw condition, the pilot instantly rolled off the throttle control, and the helicopter collided with the ground.

No mechanical problems were reported with the helicopter by the pilot. The post-accident examination of the helicopter also failed to disclose a mechanical problem.

Pilot Information

Certificate:	Private	Age:	53,Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	November 5, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	523 hours (Total, all aircraft), 523 hours (Total, this make and model)		

Page 3 of 6 ATL99TA126

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N584SD
Model/Series:	OH-6A OH-6A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	67-16449
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	November 24, 1998 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:	2914 Hrs	Engine Manufacturer:	Allison
ELT:		Engine Model/Series:	250-C-20
Registered Owner:	DESOTA COUNTY SHERIFF DEPT	Rated Power:	278 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MEM ,332 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	350°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	32°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:10 Local	Type of Airspace:	Class G

Page 4 of 6 ATL99TA126

Airport Information

Airport:	DESOTO COUNTY HELIPAD NONE	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 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.820335,-89.979438(est)

Page 5 of 6 ATL99TA126

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip	
Additional Participating Persons:	THEO MAVIDOGLOU; JACKSON , MS	
Original Publish Date:	June 23, 2000	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47294	

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 ATL99TA126