



Aviation Investigation Final Report

Location:	RUSSELLVILLE, Arkansas	Accident Number:	FTW99LA234
Date & Time:	August 23, 1999, 11:40 Local	Registration:	N44KH
Aircraft:	Hughes 269B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The flight instructor was practicing an autorotation terminating with power to the sod area between the taxiway and runway. The flight instructor stated that the engine lost power after he initiated the autorotation by lowering the collective and reducing the throttle to idle. The helicopter touched down 'hard' in a nose high attitude. The main rotor blades contacted the tailboom, severing it about 24 inches forward of the tail rotor gearbox. The helicopter rotated about 160 degrees to the left and came to a stop upright. According to the FAA inspector, an engine run was completed with no duplication of power loss.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The improper touchdown by the flight instructor.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

- Findings
1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND
 2. (C) TOUCHDOWN - IMPROPER - PILOT IN COMMAND
 3. MISC ROTORCRAFT,MAIN ROTOR/TAIL BOOM CONTACT

Factual Information

On August 23, 1999, at 1140 central daylight time, a Hughes 269B helicopter, N44KH, was substantially damaged during a practice autorotational landing at the Russellville Regional Airport, Russellville, Arkansas. The helicopter was owned and operated by Metco Helicopters, Inc., of Springdale, Arkansas. The flight instructor was not injured and his pilot rated passenger sustained minor injuries. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 local personal flight.

The flight instructor reported to the FAA inspector that he was practicing an autorotation, terminating with power, to the sod area between the taxiway and runway, near the eastern end of the runway. The flight instructor stated that the engine lost power after he initiated the autorotation by lowering the collective and reducing the throttle to idle. The helicopter touched down "hard" in a nose high attitude. The main rotor blades contacted the tailboom severing it about 24 inches forward of the tail rotor gearbox. The helicopter rotated about 160 degrees to the left and came to a stop upright.

According to the FAA inspector, the main rotor blades were removed, and an engine run was completed with no duplication of power loss.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	39, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	February 20, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	6298 hours (Total, all aircraft), 5000 hours (Total, this make and model), 5 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N44KH
Model/Series:	269B 269B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	96-0249
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	5 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3600 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	H10-360-A1A
Registered Owner:	METCO HELICOPTERS, INC.	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	KSLA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RUE ,403 ft msl	Distance from Accident Site:	
Observation Time:	10:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(RUE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	00:00 Local	Type of Airspace:	Class E

Airport Information

Airport:	RUSSELLVILLE MUNICIPAL RUE	Runway Surface Type:	Grass/turf
Airport Elevation:	403 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Simulated forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	35.270763,-93.13945(est)

Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	WILBUR D KEITH; LITTLE ROCK , AR
Original Publish Date:	December 5, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47138

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