



Aviation Investigation Factual Report

Location:	Bruceville, Texas	Accident Number:	DFW05CA168
Date & Time:	June 22, 2005, 19:45 Local	Registration:	N7487F
Aircraft:	Hughes 269C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Factual Information

On June 22, 2005, approximately 1945 central daylight time, a single-engine Hughes 269C helicopter, N7487F, registered to DD Leasing of McGregor, Texas and operated by Brazos Helicopters of Bruceville, Texas, was substantially damaged during a practice autorotation after a reported loss of engine power near Bruceville, Texas. The flight instructor and the private pilot receiving instruction, were not injured. Visual meteorological conditions prevailed throughout the area, and a flight plan was not filed for the instructional flight conducted under 14 Code of Federal Regulations Part 91. The local flight departed from a private heliport near Bruceville, Texas, approximately 1910.

According to information provided to the NTSB by the 724-hour flight instructor, the student pilot initiated a practice 180-degree autorotation to a plowed field from an altitude of 700 feet above ground level. The flight instructor added that the practice autorotation was intended to be terminated by a "power recovery," which is a typical recovery technique utilized in primary helicopter instruction. The instructor reported that, "at the time to commence a power recovery," while at approximately 20-50 feet above ground level, he noticed "the engine rpm needle was not coming up to meet the rotor rpm needle." The instructor immediately attempted to "roll maximum throttle on," but realized the throttle would not move, and took control of the helicopter. The student pilot told the instructor that the throttle was stuck. However, the instructor stated the throttle seemed "stuck because it was all the way open."

Subsequently, the helicopter contacted the ground and the right skid "dug into the soft ground." The helicopter rolled over coming to rest on its right side. The instructor stated that the engine was not running and the throttle was wide open when he took over the controls of the helicopter.

Examination of the helicopter by a Federal Aviation Administration (FAA) safety inspector, who responded to the accident site, revealed that the tail boom was severed, the main rotor blades were damaged, and the forward section of the right landing skid was separated from the landing gear crosstube assembly. Usable fuel was observed in the fuel tank and examination of the Lycoming HIO-360 engine revealed no mechanical anomalies. The throttle control cable was found connected and moved freely when manipulated by hand.

At 1951, the automated surface observing system (ASOS) at the Waco Regional Airport, near Waco, Texas, located approximately 15 miles north of the accident site reported wind from 110 degrees at 4 knots, visibility 10 statute miles, clear sky, temperature 86 degrees Fahrenheit, dew point 59 degrees Fahrenheit, and an altimeter setting of 30.06 inches of Mercury.

Flight instructor Information

Certificate:	Flight instructor	Age:	23, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; 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, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	June 1, 2005
Flight Time:	724 hours (Total, all aircraft), 298 hours (Total, this make and model), 645 hours (Pilot In Command, all aircraft), 258 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	Registration:	N7487F
Model/Series:	269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	470589
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	May 1, 2005 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:	81.1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6078.7 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	HIO-360
Registered Owner:	D.D. Leasing	Rated Power:	198 Horsepower
Operator:	Brazos Helicopters LLC	Operating Certificate(s) Held:	None
Operator Does Business As:	Brazos Helicopters LLC	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KACT	Distance from Accident Site:	25 Nautical Miles
Observation Time:	00:51 Local	Direction from Accident Site:	130°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	30°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bruceville, TX	Type of Flight Plan Filed:	None
Destination:	Bruceville, TX	Type of Clearance:	None
Departure Time:	19:10 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	31.299999,-97.150001

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Dale R Johnson; Fort Worth, Texas; Fort Worth, TX
Report Date:	July 20, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=61785

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