



# **Aviation Investigation Final Report**

Location: Hamilton, Alabama Accident Number: ATL02LA141

Date & Time: July 11, 2002, 21:00 Local Registration: N911LH

Aircraft: Hughes HU-269-A Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

### **Analysis**

According to the flight instructor, the intent of the flight was to demonstrate emergency procedures. The flight instructor demonstrated several traffic patterns and approaches. The flight instructor stated that while demonstrating an autorotation he allowed the rotor rpm to deteriorate, the helicopter lost lift, and subsequently collided with the ground.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper use of flight controls that resulted in an improper flare and a hard landing during a practice autorotation. A factor was the loss of rotor rpm.

### **Findings**

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### **Findings**

- 1. (C) FLIGHT CONTROLS IMPROPER USE OF PILOT IN COMMAND(CFI)
- 2. TERRAIN CONDITION GROUND
- 3. ROTOR RPM NOT MAINTAINED PILOT IN COMMAND(CFI)
- 4. (C) FLARE IMPROPER PILOT IN COMMAND(CFI)
- 5. EMERGENCY PROCEDURE SIMULATED
- 6. AUTOROTATION INITIATED

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#### **Factual Information**

On July 11, 2002, at 2100 central daylight time, a Hughes HU-269-A, N911LH, registered to Palmer Adam, and operated by the flight instructor, collided with the ground during autorotation, at the Marion Co-Fite Airport in Hamilton, Alabama. The instructional flight was operated under the provisions of Title 14 CFR Part 91, and visual flight rules. Visual meteorological conditions prevailed and no flight plan was filed for the local flight. The flight instructor and student pilot reported no injuries, and the helicopter was substantially damaged. The flight departed Marion Co-Fite airport at 1810, on July 11, 2002.

According to the flight instructor, the intent of the flight was to demonstrate emergency procedures. The flight instructor demonstrated several traffic patterns and approaches. The flight instructor stated that while demonstrating an autorotation he allowed the rotor rpm to deteriorate, the helicopter lost lift, and subsequently collided with the ground.

Examination of the wreckage found that the main rotor blades collided with the tailboom, and the tailboom and skids separated from the airframe. The pilot reported no mechanical problems with the helicopter prior to the accident.

#### **Pilot Information**

Certificate:	Flight instructor	Age:	39,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 21, 2002
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 18, 2001
Flight Time:	1400 hours (Total, all aircraft), 1000 hours (Total, this make and model), 1330 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Hughes	Registration:	N911LH
HU-269-A	Aircraft Category:	Helicopter
	Amateur Built:	
Normal	Serial Number:	1270737
Skid	Seats:	2
May 1, 2002 Annual	Certified Max Gross Wt.:	1670 lbs
33.4 Hrs	Engines:	1 Reciprocating
4845.5 Hrs at time of accident	Engine Manufacturer:	Lycoming
	Engine Model/Series:	HI0360BIA
Adam Palmer	Rated Power:	180 Horsepower
	Operating Certificate(s) Held:	None
	HU-269-A  Normal  Skid  May 1, 2002 Annual  33.4 Hrs  4845.5 Hrs at time of accident	HU-269-A  Aircraft Category:  Amateur Built:  Normal  Serial Number:  Skid  Seats:  May 1, 2002 Annual  Certified Max Gross Wt.:  33.4 Hrs  Engines:  4845.5 Hrs at time of accident  Engine Manufacturer:  Engine Model/Series:  Adam Palmer  Rated Power:  Operating Certificate(s)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	ANB,612 ft msl	Distance from Accident Site:	40 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	90°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.3 inches Hg	Temperature/Dew Point:	24°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hamilton, AL (HAB )	Type of Flight Plan Filed:	None
Destination:	Hamilton, AL (HAB )	Type of Clearance:	VFR
Departure Time:	18:10 Local	Type of Airspace:	Class G

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## **Airport Information**

Airport:	Marrion County HAB	Runway Surface Type:	Asphalt
Airport Elevation:	442 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	18	IFR Approach:	Practice
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Precautionary landing

## 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:	34.119167,-87.999725

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#### **Administrative Information**

Investigator In Charge (IIC):	Wilson, Butch
Additional Participating Persons:	Mike Morgan; Federal Aviation Administration Birmingham FSDO; Birmingham, AL
Original Publish Date:	December 30, 2003
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=55214

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