



Aviation Investigation Final Report

Location:	MORRISTOWN, Tennessee	Accident Number:	ATL87LA256
Date & Time:	September 11, 1987, 18:30 Local	Registration:	N8709F
Aircraft:	HUGHES 269A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

ONE CFI WAS DEMONSTRATING HIS PROCEDURES FOR AUTOROTATIONS WITH POWER RECOVERY TO HIS EMPLOYER WHO WAS ALSO A CFI. THIS WAS TO INSURE STANDARDIZATION WITHIN THE HELICOPTER PILOT SCHOOL. THE AUTOROTATION WAS ENTERED FROM ABOUT 700 FEET AGL TO THE DEPARTURE AIRPORT. AT ABOUT 50 TO 60 FEET AGL, THE FLARE FOR LANDING WAS INITIATED AND POWER WAS APPLIED FOR THE RECOVERY. REPORTEDLY, THE APPLICATION OF POWER WAS TOO LATE FOR RECOVERY AND THE HELICOPTER CONTACTED THE GROUND IN A NOSE HIGH ATTITUDE. SUBSEQUENTLY, THE MAIN ROTOR BLADES SEVERED THE TAIL BOOM AND THE HELICOPTER ROLLED OVER.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) FLARE - DELAYED - PILOT IN COMMAND
2. (C) SUPERVISION - INADEQUATE - CHECK PILOT

Occurrence #2: ROLL OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor; Private	Age:	28, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	February 11, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3269 hours (Total, all aircraft), 95 hours (Total, this make and model), 3025 hours (Pilot In Command, all aircraft), 162 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N8709F
Model/Series:	269A 269A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	111021
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	July 1, 1987 Annual	Certified Max Gross Wt.:	1575 lbs
Time Since Last Inspection:	97 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2850 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HO-360-B1B
Registered Owner:	DONALD F FRANCIS	Rated Power:	180 Horsepower
Operator:	HAL-LE-COPTERS, INC.	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:	TYS ,981 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	17:50 Local	Direction from Accident Site:	234°
Lowest Cloud Condition:	Unknown / 4000 ft AGL	Visibility	7 miles
Lowest Ceiling:	Overcast / 4000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:25 Local	Type of Airspace:	Class G

Airport Information

Airport:	MOORE-MURRELL MOR	Runway Surface Type:	Asphalt
Airport Elevation:	1313 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	5700 ft / 100 ft	VFR Approach/Landing:	Simulated forced landing;Traffic pattern

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:	36.210239,-83.290809(est)

Administrative Information

Investigator In Charge (IIC): Stiner, Walter

Additional Participating Persons:

Original Publish Date: January 25, 1989

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=7517>

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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](#).