



National Transportation Safety Board Aviation Accident Final Report

Location:	VERO BEACH, FL	Accident Number:	MIA90LA076
Date & Time:	03/02/1990, 1430 EST	Registration:	N58275
Aircraft:	HUGHES 300C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

THE INSTRUCTOR PILOT AND THE RATED HELICOPTER PILOT WERE PRACTICING TOUCHDOWN AUTOROTATIONS. AFTER A LANDING AND GROUND SLIDE, THEY BOTH NOTED VIBRATIONS, THEN SHUT DOWN THE ENGINE AND EXITED THE HELICOPTER. THE MAIN ROTOR BLADES HAD STRUCK THE TAILBOOM AND SEVERED THE TAIL ROTOR DRIVESHAFT. THE WIND AT 1450 CST WAS FROM 140 DEG AT 16 GUSTING 22 KTS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE PILOT IN COMMAND/INSTRUCTOR PILOT TO MAINTAIN ADEQUATE ROTOR RPM AFTER LANDING FROM A TOUCHDOWN AUTOROTATION. A FACTOR RELATED TO THE ACCIDENT WAS THE GUSTY WIND CONDITION.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: LANDING

Findings

1. AUTOROTATION - PERFORMED
2. (F) WEATHER CONDITION - GUSTS
3. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Factual Information

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	22, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	10/25/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	650 hours (Total, all aircraft), 327 hours (Total, this make and model), 550 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N58275
Model/Series:	300C 300C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	1190849
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	01/25/1990, 100 Hour	Certified Max Gross Wt.:	2050 lbs
Time Since Last Inspection:	73 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3467 Hours	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360-D1A
Registered Owner:	FLIGHT SAFETY INTERNATIONAL	Rated Power:	225 hp
Operator:	FLIGHT SAFETY INT'L	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	VRB, 25 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1450 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 4000 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	16 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	24° C / 17° C
Precipitation and Obscuration:			
Departure Point:	(VRB)	Type of Flight Plan Filed:	None
Destination:	(VRB)	Type of Clearance:	None
Departure Time:	1400 EST	Type of Airspace:	

Airport Information

Airport:	VERO BEACH (VRB)	Runway Surface Type:	Asphalt
Airport Elevation:	25 ft	Runway Surface Condition:	Dry
Runway Used:	11L	IFR Approach:	None
Runway Length/Width:	3504 ft / 75 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	ANDREW A ALSTON	Report Date:	09/30/1991
Additional Participating Persons:	HOOPER HARRIS; ORLANDO, FL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).