



Aviation Investigation Final Report

Location:	RIO GRANDE, Puerto Rico	Accident Number:	MIA93LA076
Date & Time:	February 28, 1993, 17:00 Local	Registration:	N37870
Aircraft:	HUDDLESTON-BELL 47G2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE STUDENT PLT REPORTED THAT DURING CRUISE FLT, HE NOTED A STRONG VIBRATION FROM THE HELICOPTER AND A TENDENCY FOR THE HELICOPTER TO GO TO THE RIGHT. HE EXECUTED A 180-DEGREE TURN AND WHILE DESCENDING FOR A PRECAUTIONARY LANDING TO A CONCRETE PAD, THE MAIN ROTOR BLADES COLLIDED WITH A TREE. THE HELICOPTER THEN DESCENDED, COLLIDED WITH THE GROUND, AND ROLLED ONTO ITS RT SIDE. NO DETERMINATION COULD BE MADE AS TO THE REASON FOR THE REPORTED VIBRATION OR YAWING TENDENCY. ACCORDING TO AN FAA INSPECTOR WHO EXAMINED THE HELICOPTER AT THE ACCIDENT SITE, AN OPEN FIELD WAS ADJACENT TO THE CONCRETE PAD AND A PASSENGER WAS IN THE HELICOPTER WHEN IT CRASHED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: POOR IN-FLIGHT PLANNING BY THE PILOT-IN-COMMAND. CONTRIBUTING TO THE ACCIDENT WAS THE FLIGHT'S LACK OF TOTAL EXPERIENCE.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - NORMAL

Findings

1. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND

2. OBJECT - TREE(S)
3. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
4. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - RESIDENTIAL AREA

Factual Information

Pilot Information

Certificate:	Student	Age:	50, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 27, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	107 hours (Total, all aircraft), 107 hours (Total, this make and model), 35 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUDDLESTON-BELL	Registration:	N37870
Model/Series:	47G2 47G2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:		Serial Number:	47-1965-2
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	July 10, 1992 Annual	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	75 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	719 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1D
Registered Owner:	PEREZ, SANTIAGO T.	Rated Power:	260 Horsepower
Operator:	PEREZ, SANTIAGO T.	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:	SJU ,10 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	16:52 Local	Direction from Accident Site:	299°
Lowest Cloud Condition:	Scattered / 3600 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	26°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CAROLINA , PR (NONE)	Type of Flight Plan Filed:	None
Destination:	FAJARDO , PR (X95)	Type of Clearance:	None
Departure Time:	16:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Precautionary landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Monville, Timothy
Additional Participating Persons:	EDWARD H WARMOTH; SAN JUAN , PR JAOQUIN CAMACHO; SAN JUAN , PR
Original Publish Date:	February 10, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=33233

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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](#).