



Aviation Investigation Final Report

Location:	PALM BEACH, Florida	Accident Number:	MIA93LA014
Date & Time:	November 4, 1992, 10:05 Local	Registration:	N94720
Aircraft:	BELL 47-G3-B1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE AGRICULTURAL PILOT STATED THAT HE HAD COMPLETED HIS SPRAYING AND HAD LANDED, WHEN A GROVE WORKER REQUESTED A RIDE OVER THE GROVE. WHILE MANEUVERING AT 150 FEET, THE ENGINE LOST POWER. DURING THE AUTOROTATION, THE ROTOR RPM DECAYED AND THE HELICOPTER LANDED HARD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE PREFLIGHT PLANNING. A FACTOR WAS THE PILOT'S FAILURE TO MAINTAIN ROTOR RPM DURING THE AUTOROTATION.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: CRUISE

Findings

1. FLUID,FUEL - EXHAUSTION
 2. (C) PREFLIGHT PLANNING/PREPARATION - NOT PERFORMED - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. (C) ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	51, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 9, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3611 hours (Total, all aircraft), 113 hours (Total, this make and model), 2454 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N94720
Model/Series:	47-G3-B1 47-G3-B1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	67-159115
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	November 19, 1991 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	40 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6656 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TVO-435-D1A
Registered Owner:	COLONY HELICOPTERS INC.	Rated Power:	220 Horsepower
Operator:	COLONY HELICOPTERS INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	COOG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PBI ,12 ft msl	Distance from Accident Site:	22 Nautical Miles
Observation Time:	09:57 Local	Direction from Accident Site:	110°
Lowest Cloud Condition:	Scattered / 1900 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced 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:	26.689565,-80.030807(est)

Administrative Information

Investigator In Charge (IIC):	Alston, Andrew
Additional Participating Persons:	RICHARD SHAFFER; FT. LAUDERDALE , FL
Original Publish Date:	September 28, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=33193

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