



# National Transportation Safety Board Aviation Accident Factual Report

<b>Location:</b>	Pompano Beach, FL	<b>Accident Number:</b>	MIA05CA002
<b>Date &amp; Time:</b>	10/02/2004, 1630 EDT	<b>Registration:</b>	N220CK
<b>Aircraft:</b>	Robinson R-22	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

On October 2, 2004, about 1630 eastern daylight time, a Robinson R-22 helicopter, N220CK, registered to and operated by Helicopters of America, as a Title 14 CFR Part 91 instructional flight, made a hard landing at Pompano Beach Airpark, Pompano Beach, Florida. Visual meteorological conditions prevailed, and no flight plan was filed. The commercial-rated flight instructor and student received minor injuries, and the helicopter incurred substantial damage. The flight originated at Pompano Beach, Florida, the same day, about 1625.

The flight instructor stated that he and his student had been flying for about an hour prior to the accident. He further stated that they were on their fourth or fifth autorotation, and it looked as if they were going to overshoot the spot of intended landing, so they performed some "S" turns, and initiated a flare. He said during the flare the helicopter continued to descend, and it impacted the ground on the rear of the skids, severing the tail boom.

## Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	30, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	02/09/2004
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	06/01/2003
<b>Flight Time:</b>	1560 hours (Total, all aircraft), 1150 hours (Total, this make and model), 1500 hours (Pilot In Command, all aircraft), 265 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Student Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	52, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	12/01/2003
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	147 hours (Total, all aircraft), 100 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Robinson	<b>Registration:</b>	N220CK
<b>Model/Series:</b>	R-22	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3067
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	09/11/2004, 100 Hour	<b>Certified Max Gross Wt.:</b>	1370 lbs
<b>Time Since Last Inspection:</b>	53 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3343 Hours at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	O-360-J2A
<b>Registered Owner:</b>	Helicopters of America	<b>Rated Power:</b>	145 hp
<b>Operator:</b>	Helicopters of America	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PMP, 18 ft msl	Distance from Accident Site:	
Observation Time:	1633 EDT	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 3500 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.06 inches Hg	Temperature/Dew Point:	28° C / 24° C
Precipitation and Obscuration:			
Departure Point:	Pompano Beach, FL (PMP)	Type of Flight Plan Filed:	None
Destination:	(PMP)	Type of Clearance:	None
Departure Time:	1625 EDT	Type of Airspace:	Class D

## Airport Information

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

## Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	26.246944, -80.111111

## Administrative Information

Investigator In Charge (IIC):	John W Lovell
Additional Participating Persons:	Ray Lleres; Fort Lauderdale, Florida
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .