



National Transportation Safety Board Aviation Accident Final Report

Location:	Fort Lauderdale, FL	Accident Number:	ATL03LA039
Date & Time:	02/01/2003, 0945 EST	Registration:	N528EE
Aircraft:	Robinson R22	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The private pilot was demonstrating a run on landing to the check pilot. The helicopter touched down in the sod area adjacent to runway 08 in a level attitude at or above effective translational lift. During the deceleration the left front skid contacted an unknown object which slowed the helicopter rapidly. The private pilot lunged forward in his seat and inadvertently moved the cyclic forward and to the left and increased collective pitch. The helicopter pivoted around the toe of the left skid and rolled over on its left side before he or the check pilot could take any corrective action. The private pilot stated the helicopter did not experience any mechanical failure or malfunction.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The private pilots improper use of flight controls during a run on landing resulting in a roll over.

Findings

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

Findings

1. TERRAIN CONDITION - GROUND
2. (C) FLIGHT CONTROLS - IMPROPER USE OF - PILOT IN COMMAND

Factual Information

On February 1, 2003, at 0945 eastern standard time, a Robinson R22 helicopter, N528EE, registered to a private owner, leased to Heliflight Inc., operating as a 14 CFR Part 91 instructional flight, collided with an unknown object on the ground during a run on landing at Fort Lauderdale Executive Airport, Fort Lauderdale, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The helicopter rolled over on its left side and sustained substantial structural damage to the cabin and tailboom assembly. The private pilot and airline transport rated check pilot reported no injuries. The flight originated from Fort Lauderdale Executive Airport, Fort Lauderdale, Florida, at 0830.

The private pilot stated he was demonstrating a run on landing to the check pilot. The helicopter touched down in the sod area adjacent to runway 08 in a level attitude at or above effective translational lift. During the deceleration the left front skid contacted "something" which slowed the helicopter rapidly. The pilot stated he lunged forward in his seat and inadvertently moved the cyclic forward and to the left and increased collective pitch. The helicopter pivoted around the toe of the left skid and rolled over on its left side before he or the check pilot could take any corrective action. He further stated the helicopter did not experience any mechanical failure or malfunction.

Examination of the crash site did not identify the unknown object that the helicopter collided with.

Pilot Information

Certificate:	Private	Age:	27, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	05/21/2000
Occupational Pilot:		Last Flight Review or Equivalent:	01/13/2003
Flight Time:	244 hours (Total, all aircraft), 117 hours (Total, this make and model), 159 hours (Pilot In Command, all aircraft), 78 hours (Last 90 days, all aircraft), 41 hours (Last 30 days, all aircraft)		

Check Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	62, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Balloon; Glider; Gyroplane; Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Glider; Helicopter; Instrument Airplane; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	12/06/2002
Occupational Pilot:		Last Flight Review or Equivalent:	10/09/2002
Flight Time:	21500 hours (Total, all aircraft), 5000 hours (Total, this make and model), 21000 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N528EE
Model/Series:	R22	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0528
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	01/16/2003, 100 Hour	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:	48 Hours	Engines:	1 Reciprocating
Airframe Total Time:	10621 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	O-320-B2C
Registered Owner:	Matthew L. Spitzer	Rated Power:	160 hp
Operator:	Heliflight	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FXE, 14 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0953 EST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	19° C / 12° C
Precipitation and Obscuration:			
Departure Point:	Fort Lauderdale, FL (FXE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0830	Type of Airspace:	Class D

Airport Information

Airport:	Fort Lauderdale Executive (FXE)	Runway Surface Type:	Unknown
Airport Elevation:	14 ft	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		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:	26.197222, -80.170556

Administrative Information

Investigator In Charge (IIC):	Carrol A Smith	Report Date:	05/30/2003
Additional Participating Persons:	Edward Morales; Fort Lauderdale FSDO-17; Fort Lauderdale, 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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