



National Transportation Safety Board Aviation Accident Final Report

Location:	Bourne, MA	Accident Number:	NYC06CA020
Date & Time:	11/01/2005, 1300 EST	Registration:	N319CD
Aircraft:	Robinson R44	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - External Load

Analysis

The pilot was conducting external load operations, when a gust of wind blew the lifting strap into the tail rotor. The helicopter began to shudder, and rotate to the left. The pilot entered an autorotation; however, during landing, the helicopter rolled over onto its left side. Winds reported at an airport located about 4 miles east-southeast of the accident site, about the time of the accident, were from 200 degrees at 17 knots, with 23 knot gusts.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadvertent contact of a lift strap with the tail rotor during external load operations, which resulted in a forced landing and subsequent collision with terrain. A factor in this accident was the gusty wind conditions.

Findings

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

Findings

1. (C) OBJECT - OTHER
2. (F) WEATHER CONDITION - GUSTS

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. TERRAIN CONDITION - GROUND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	39, Male
Airplane Rating(s):	None	Seat Occupied:	Rear
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without Waivers/Limitations	Last FAA Medical Exam:	05/01/2005
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	731 hours (Total, all aircraft), 355 hours (Total, this make and model), 135 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Robinson	Registration:	N319CD
Model/Series:	R44	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	0585
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	06/01/2003, 100 Hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	80 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2278 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-540
Registered Owner:	Firefly Leasing Inc.	Rated Power:	205 hp
Operator:	Firefly Leasing Inc.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FMH, 131 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	1255 EST	Direction from Accident Site:	120°
Lowest Cloud Condition:		Visibility	15 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	17 knots / 23 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	18°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wareham, MA (NONE)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	1215 EST	Type of Airspace:	

Airport Information

Airport:	Falmouth (FMH)	Runway Surface Type:	
Airport Elevation:	131 ft	Runway Surface Condition:	
Runway Used:	NA	IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.677222, -70.600833

Administrative Information

Investigator In Charge (IIC):	Luke Schiada	Report Date:	02/28/2006
Additional Participating Persons:	Jack Keenan; FAA FSDO-01; Lexington, MA		
Publish Date:			
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 pubinquiry@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](#).