



Aviation Investigation Final Report

Location:	Aiken, South Carolina	Accident Number:	ATL07CA009
Date & Time:	October 14, 2006, 14:58 Local	Registration:	N848TL
Aircraft:	Lawing Thomas R Exec 162-F	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated "I started to lift off from the Aiken Airport when a tailwind, estimated by a CFI who was nearby, of 20+ mph caught my tail. I lost tail rotor control at [approximately] 10 [feet] off the ground. As N848TL spun around, I lowered the collective and struck the pavement. The helicopter rolled onto the pilot's side [and] stopped."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to adequately compensate for wind conditions during takeoff which resulted in a loss of tail rotor effectiveness and a roll over during an attempted forced landing.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF

Findings

1. WEATHER CONDITION - GUSTS
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. LOSS OF TAIL ROTOR EFFECTIVENESS - INADVERTENT - PILOT IN COMMAND

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

Occurrence #3: ROLL OVER
Phase of Operation: EMERGENCY DESCENT/LANDING

Factual Information

On October 14, 2006, at 1458 eastern daylight time, a Lawing, Thomas R., Exec 162-F, experimental helicopter, N848TL, registered to a private owner, operating as a 14 CFR Part 91, personal flight, collided with the runway during takeoff from the Aiken Municipal Airport in Aiken, South Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The helicopter received substantial damage. The private pilot and passenger reported no injuries. The flight was originating at the time of the accident.

According to the pilot, "I started to lift off from the Aiken Airport when a tailwind, estimated by a CFI who was nearby, of 20+ mph caught my tail. I lost tail rotor control at [approximately] 10 [feet] off the ground. As N848TL spun around, I lowered the collective and struck the pavement. The helicopter rolled onto the pilot's side [and] stopped. There were many spectators nearby who removed us from the aircraft." Damage to the helicopter consisted of the tail boom, tail rotor, and main rotor.

The 1553 surface weather observation at Augusta Regional Airport, Augusta, Georgia, located 21 nautical miles southwest of the crash site was wind 250 degrees at 5 knots, visibility 10 miles, clear of clouds, temperature 66 degrees Fahrenheit, dew point temperature 39 degrees Fahrenheit, and altimeter 30.00.

According to an FAA Inspector, the helicopter lost tail rotor effectiveness and landed on the taxiway on its right side causing substantial damage. There were no mechanical problems reported by the pilot or discovered during the post-accident examination of the helicopter.

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	September 1, 2006
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 1, 2005
Flight Time:	900 hours (Total, all aircraft), 97 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Lawing Thomas R	Registration:	N848TL
Model/Series:	Exec 162-F	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	6544
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	October 1, 2006 Continuous airworthiness	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	82 Hrs as of last inspection	Engine Manufacturer:	Rotorway
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	162-F
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AGS	Distance from Accident Site:	
Observation Time:	15:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	19°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Aiken, SC (AIK)	Type of Flight Plan Filed:	None
Destination:	Aiken, SC (AIK)	Type of Clearance:	None
Departure Time:	14:58 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.642776,-81.684448

Administrative Information

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Toni Finocchi; Columbia FSDO; Columbia, SC
Original Publish Date:	February 26, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=64708

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