



National Transportation Safety Board Aviation Accident Final Report

Location:	Eufaula, AL	Accident Number:	ERA12CA199
Date & Time:	03/01/2012, 1200 CST	Registration:	N38FA
Aircraft:	BELL OH-58A	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The pilot reported that he was conducting annual refresher training with a certified flight instructor. During a practice autorotation to runway 18, the helicopter descended below a nearby tree line and then suddenly dropped. He stated that the helicopter descended so rapidly that he was unable to arrest the descent rate and the helicopter landed hard. The pilot reported that the wind was from 230 degrees at 10 knots with gusts to 19 knots at the time of the accident. He reported that, as the helicopter descended below treetop level, "...we lost all lift and wind advantage." The hard landing resulted in a fractured tail boom. The pilots reported no mechanical malfunctions or failures that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for the gusting wind, which resulted in an excessive descent rate and hard landing.

Findings

Aircraft	Descent rate - Not attained/maintained (Cause)
Personnel issues	Aircraft control - Pilot (Cause)
Environmental issues	Gusts - Response/compensation (Cause)

Factual Information

History of Flight

Autorotation	Hard landing (Defining event)
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Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	65, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	01/17/2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	01/19/2011
Flight Time:	23155 hours (Total, all aircraft), 14000 hours (Total, this make and model), 22000 hours (Pilot In Command, all aircraft)		

Flight Instructor Information

Certificate:	Airline Transport; Flight Instructor	Age:	56, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Helicopter; Instrument Airplane; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last Medical Exam:	09/06/2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	09/17/2011
Flight Time:	25000 hours (Total, all aircraft), 8000 hours (Total, this make and model), 24950 hours (Pilot In Command, all aircraft), 240 hours (Last 90 days, all aircraft), 80 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BELL	Registration:	N38FA
Model/Series:	OH-58A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted; Utility	Serial Number:	70-15448
Landing Gear Type:	Skid	Seats:	5
Date/Type of Last Inspection:	10/21/2011, 100 Hour	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:		Engines:	1 Turbo Shaft
Airframe Total Time:	7706 Hours	Engine Manufacturer:	Rolls Royce
ELT:	Not installed	Engine Model/Series:	T63-A720
Registered Owner:	B & S AIR INC	Rated Power:	420 hp
Operator:	B & S AIR INC	Air Carrier Operating Certificate:	

Meteorological Information and Flight Plan

Observation Facility, Elevation:	EUf, 285 ft msl	Observation Time:	1158 CST
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 5500 ft agl	Temperature/Dew Point:	24° C / 17° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	7 knots/ 15 knots, 270°	Visibility (RVR):	
Altimeter Setting:	29.96 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Eufaula, AL (EUf)	Type of Flight Plan Filed:	None
Destination:	Eufaula, AL (EUf)	Type of Clearance:	None
Departure Time:	1130 CST	Type of Airspace:	

Airport Information

Airport:	Weedon Field Airport (EUf)	Runway Surface Type:	Asphalt
Airport Elevation:	285 ft	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Simulated Forced Landing; Stop and Go; Straight-in; 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		

Administrative Information

Investigator In Charge (IIC):	Ralph E Hicks	Adopted Date:	07/18/2012
Additional Participating Persons:	David Hargett; FAA/FSDO; Vestavia Hills, AL		
Publish Date:	07/18/2012		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=83005		

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