



Aviation Investigation Final Report

Location:	THOMASVILLE, Illinois	Accident Number:	CHI83LA295
Date & Time:	July 3, 1983, 08:00 Local	Registration:	N5185B
Aircraft:	BELL 47G2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 133: Rotorcraft ext. load		

Analysis

THE HELICOPTER TAIL ROTOR STRUCK THE GROUND DURING LANDING. THE HELICOPTER WAS ENGAGED IN AERIAL APPLICATION AND WAS RETURNING TO RELOAD. THE PLT REPORTED THAT AT TOUCHDOWN A GUST OF WIND CAUSED THE TAIL ROTOR TO HIT THE GROUND. DECATUR WINDS WERE REPORTED AS FROM 190 DEGREES AT 12 KTS AT 0750 CDT. NO GUSTS REPORTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - UNFAVORABLE WIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) MANEUVER - INACCURATE - PILOT IN COMMAND

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: LANDING - FLARE/TOUCHDOWN



Factual Information

Pilot Information

Certificate:	Commercial	Age:	29, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	February 28, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	3715 hours (Total, all aircraft), 195 hours (Total, this make and model), 3519 hours (Pilot In Command, all aircraft), 258 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N5185B
Model/Series:	47G2 47G2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1540
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	February 7, 1983 Annual	Certified Max Gross Wt.:	2790 lbs
Time Since Last Inspection:	116 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7048 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1B
Registered Owner:	ROBERT E. DAVIS	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DEC ,679 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	07:50 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 4500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	650 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	39.499626,-89.759956(est)

Administrative Information

Investigator In Charge (IIC): Mcavoy, E.

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=12246>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).