



Aviation Investigation Final Report

Location:	Casper, Wyoming	Accident Number:	DEN08CA035
Date & Time:	November 28, 2007, 08:20 Local	Registration:	N222LF
Aircraft:	Bell 222 UT	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

A Bell 222 helicopter, N222LF, operated by C J Systems Aviation Group, was substantially damaged when during the engine start at the Casper Medical Center, Casper, Wyoming; a wind gust forced the main rotor blade into the left vertical stabilizer fin and tail boom. The positioning flight was being conducted under the provisions of Title 14 CFR Part 91. The commercial pilot on board was not injured. Visual meteorological conditions prevailed at the time of accident. The wind conditions At Natrona County Airport, 6 miles west of the hospital were reported as out of the west at 30 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: High winds forcing the helicopter's main rotor blade to strike the helicopter vertical stabilizer and tail boom during engine start, causing substantial damage.

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH WEATHER
Phase of Operation: STANDING - ENGINE(S) OPERATING

Findings

1. (C) WEATHER CONDITION - HIGH WIND

Occurrence #2: MISCELLANEOUS/OTHER

Phase of Operation: STANDING - ENGINE(S) OPERATING

Findings

2. (C) ROTOR SYSTEM,MAIN ROTOR BLADE - BLADE STRIKE

Factual Information

A Bell 222 helicopter, N222LF, operated by C J Systems Aviation Group, was substantially damaged when during engine start at the Casper Medical Center, Casper, Wyoming; a wind gust forced the main rotor blade into the left vertical stabilizer fin and tail boom. The positioning flight was being conducted under the provisions of Title 14 CFR Part 91. The commercial pilot on board was not injured. Visual meteorological conditions prevailed at the time of accident. The wind conditions At Natrona County Airport, 6 miles west of the hospital were reported as out of the west at 30 knots.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	26, Male
Airplane Rating(s):	None	Seat Occupied:	
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	May 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2141 hours (Total, all aircraft), 29 hours (Total, this make and model), 91 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N222LF
Model/Series:	222 UT	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Transport	Serial Number:	47528
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	2 Turbo shaft
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	LTS 101-750
Registered Owner:	C J Systems Aviation Group	Rated Power:	650 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Casper, WY	Type of Flight Plan Filed:	Company VFR
Destination:	Casper, WY (CAP)	Type of Clearance:	VFR
Departure Time:	08:20 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 None	Latitude, Longitude:	42.904998,-106.457778

Administrative Information

Investigator In Charge (IIC): Bowling, David

Additional Participating Persons:

Original Publish Date: December 20, 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=67191>

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](#).