



National Transportation Safety Board Aviation Incident Data Summary

Location:	Relience, TN	Incident Number:	ERA111A436
Date & Time:	08/01/2011, 1818 EDT	Registration:	N484AE
Aircraft:	BELL 206	Injuries:	4 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Medical Emergency)		

Analysis

Before landing, the pilot performed a high and low reconnaissance of the area and received a briefing of the obstacles by the landing zone. The crew was advised of wires along the road north of the field and large rolls of hay spaced intermittently across the field. The pilot then landed the helicopter in a field and picked up a patient who had been involved in a motor vehicle accident. Given the weight of the helicopter and power available, the pilot elected to perform an airspeed-over-altitude takeoff on a westerly departure path along the long axis of the landing zone. The departure path was signaled to the landing zone commander, who issued an approval for the takeoff. During the initial takeoff climb, the helicopter struck wires and returned to the field for landing. After the incident, a closer inspection of the takeoff path revealed that a three-strand group of wires crossed the west side of the field perpendicular to the takeoff path. When viewed from the point of departure, the wires appeared to emanate from the thick, tall tree lines that bordered both sides of the landing zone, and were superimposed against a background of dense woods. There were no additional visual cues (poles, towers, or transformers) available that could be associated with the wires. Additionally, at the time of the accident, the sun was directly in the takeoff path and 30 degrees above the horizon. The bright sunlight and glare conditions likely reduced the ability of ground crew and the flight crew to discern wire obstacles.

Flight Events

Initial climb - Controlled flight into terr/obj (CFIT)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: Inadvertent contact with wires due to the lack of visual cues regarding their presence and the low angle of the sun, which was directly in the takeoff path.

Findings

Environmental issues-Physical environment-Object/animal/substance-Wire-Awareness of condition - C

Environmental issues-Conditions/weather/phenomena-Light condition-Glare-Not specified

Environmental issues-Conditions/weather/phenomena-Light condition-Bright light-Not specified

Pilot Information

Certificate:	Commercial	Age:	30
Airplane Rating(s):	None	Instrument Rating(s):	Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	2173 hours (Total, all aircraft), 116 hours (Total, this make and model), 1223 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BELL	Registration:	N484AE
Model/Series:	206 L4	Engines:	1 Turbo Shaft
Operator:	AIR EVAC EMS INC	Engine Manufacturer:	Rolls-Royce
Air Carrier Operating Certificate:	On-demand Air Taxi (135)	Engine Model/Series:	250-C30P
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Medical Emergency)		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KCHA, 682 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	6 knots, 20°
Temperature:	36° C / 15° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Relience, TN	Destination:	Chattanooga, TN (OTN8)

Wreckage and Impact Information

Crew Injuries:	3 None	Aircraft Damage:	Minor
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Brian C Rayner	Adopted Date:	04/24/2012
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=81355		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.