



# National Transportation Safety Board Aviation Incident Data Summary

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<b>Location:</b>	KNOXVILLE, TN	<b>Incident Number:</b>	ATL911A014
<b>Date &amp; Time:</b>	11/02/1990, 2125 EST	<b>Registration:</b>	N412UT
<b>Aircraft:</b>	BELL 412	<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

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## Analysis

THE NIGHT, VFR FLIGHT WAS DISPATCHED TO A STRETCH OF INTERSTATE HIGHWAY TO PICK UP A PATIENT. PRIOR TO LANDING THE LZ WAS SEARCHED FOR OBSTRUCTIONS WITH THE 'NIGHT SUN', AND THE GROUND PERSONNEL ALSO INSPECTED THE LZ. NO OBSTRUCTIONS WERE REPORTED OR OBSERVED IN THE IMMEDIATE LZ AREA. AFTER LANDING, THE PILOT ALSO WALKED THE DEPARTURE CORRIDOR WITH A FLASHLIGHT. SHORTLY AFTER TAKEOFF, THE HELICOPTER COLLIDED WITH FOUR WIRES WHICH WERE STRUNG ACROSS THE HIGHWAY. NEITHER THE FLIGHT CREW NOR THE GROUND PERSONNEL SAW THE WIRES PRIOR TO THE COLLISION. THE WIRES WERE BLACK IN COLOR, AND THE POLES WERE HIDDEN BY BUILDINGS AND TREES. ALSO, HIGH INTENSITY LIGHT STANDARDS LINED THE HIGHWAY AT THE LZ.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE PILOT'S FAILURE TO SEE AND AVOID THE WIRES PRIOR TO THE COLLISION. FACTORS IN THE INCIDENT WERE THE FAILURE OF THE GROUND PERSONNEL TO ADEQUATELY INSPECT THE LANDING ZONE, THE PRESENCE OF HIGH INTENSITY LIGHTS AT THE LZ, AND THE DARK LIGHTING CONDITIONS.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. TERRAIN CONDITION - ROADWAY/HIGHWAY
2. (F) LIGHT CONDITION - DARK NIGHT
3. OBJECT - WIRE, TRANSMISSION
4. (C) VISUAL LOOKOUT - INADEQUATE - PILOT IN COMMAND
5. (F) VISUAL LOOKOUT - INADEQUATE - GROUND PERSONNEL

## Pilot Information

<b>Certificate:</b>	Airline Transport	<b>Age:</b>	39
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane; Helicopter
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	
<b>Flight Time:</b>	6278 hours (Total, all aircraft), 556 hours (Total, this make and model), 4812 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BELL	<b>Registration:</b>	N412UT
<b>Model/Series:</b>	412 412	<b>Engines:</b>	2 Turbo Shaft
<b>Operator:</b>	UNIVERSITY OF TENNESSEE	<b>Engine Manufacturer:</b>	P&W
<b>Operating Certificate(s) Held:</b>	On-demand Air Taxi (135)	<b>Engine Model/Series:</b>	PT6T-3B
<b>Flight Conducted Under:</b>	Part 135: Air Taxi & Commuter - Non-scheduled		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Night/Dark
<b>Observation Facility, Elevation:</b>	TYS, 981 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	Calm / ,
<b>Temperature:</b>	-18°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>			<b>Destination:</b>

## Wreckage and Impact Information

<b>Crew Injuries:</b>	3 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	RALPH E HICKS	<b>Adopted Date:</b>	12/30/1992
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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