



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Fort Gibson, OK	<b>Accident Number:</b>	FTW03FA028
<b>Date &amp; Time:</b>	11/01/2002, 1150 CST	<b>Registration:</b>	N8885F
<b>Aircraft:</b>	Hughes 269A	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

During cruise flight, the helicopter experienced an in-flight breakup. Witnesses observed what appeared to be tail rotor, and main rotor components separate from the helicopter as it flew overhead. One of the witnesses reported that a portion of the tail rotor separated, and as helicopter pitched to the right, the main rotor separated. Subsequently, the helicopter's main fuselage started to spin and descended vertically toward the ground. Another witness reported that he heard a "pop," and observed the main rotor slowing, wobbling, stop turning, break away from the helicopter, and travel forward of the helicopter. He reported that the helicopter pitched "nose forward and then fell almost vertical." The main rotor assembly was found approximately 450 feet east of the main wreckage site, and the tail rotor components were found with the main wreckage. Metallurgical examination revealed that the left cluster fitting lugs (P/N 269A2234), which attached to the left tail boom strut, failed due to fatigue.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The in-flight separation of the tail boom resulting from the failure of the fuselage to tail boom attachment fitting lugs, due to fatigue.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: CRUISE

### Findings

1. (C) FUSELAGE, ATTACHMENT - FAILURE
  2. (C) MISC ROTORCRAFT, TAIL BOOM - SEPARATION
  3. (C) MISCELLANEOUS, BOLT/NUT/FASTENER/CLAMP/SPRING - FATIGUE
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: CRUISE - NORMAL

### Findings

4. AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Findings

### 5. TERRAIN CONDITION - GROUND

#### Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	45
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1000 hours (Total, all aircraft)		

#### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Hughes	<b>Registration:</b>	N8885F
<b>Model/Series:</b>	269A	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	Tundra Resources Corporation	<b>Engine Manufacturer:</b>	Lycoming
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	HO-360-B1B
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

#### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MKO, 610 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Overcast / 6000 ft agl	<b>Wind Speed/Gusts, Direction:</b>	7 knots / , 10°
<b>Temperature:</b>	6°C	<b>Visibility</b>	7 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Cookson, OK	<b>Destination:</b>	Tulsa (RVS)

#### Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-Ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	35.776389, -95.136389		

## Administrative Information

Investigator In Charge (IIC): Joyce Roach

Adopted Date: 06/30/2004

Investigation Docket: 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 [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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