



# National Transportation Safety Board Aviation Accident Data Summary

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<b>Location:</b>	GALLUP, NM	<b>Accident Number:</b>	DEN00LA001
<b>Date &amp; Time:</b>	10/01/1999, 0645 MDT	<b>Registration:</b>	N716JB
<b>Aircraft:</b>	GRAY ROTORWAY EXEC	<b>Injuries:</b>	1 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

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## Analysis

The pilot remained in the traffic pattern to practice touch and go landings. At approximately the point where the helicopter would turn onto the base leg, rotor rpm began to decay (95%). The pilot turned towards the runway and began autorotation. During the descent, the pilot managed to avoid houses and powerlines. The helicopter struck the ground tail first, then rolled over on its left side. The engine was later functionally tested and, despite impact damage to the crankshaft, operated normally.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot inadvertently allowing main rotor rpm to decay while avoiding obstacles during an emergency autorotation following a loss of power for reasons undetermined. Factors were houses and powerlines.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: APPROACH - VFR PATTERN - BASE TURN

Findings  
1. AUTOROTATION - PERFORMED - PILOT IN COMMAND  
2. REASON FOR OCCURRENCE UNDETERMINED  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

Findings  
3. OBJECT - RESIDENCE  
4. ROTOR RPM - NOT MAINTAINED - PILOT IN COMMAND  
5. OBJECT - WIRE, TRANSMISSION  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - EMERGENCY

## Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	51
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	158 hours (Total, all aircraft), 155 hours (Total, this make and model), 127 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GRAY	<b>Registration:</b>	N716JB
<b>Model/Series:</b>	ROTORWAY EXEC ROTORWAY E	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	JIM R. GRAY	<b>Engine Manufacturer:</b>	Rotorway
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	RW-152
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Dawn
<b>Observation Facility, Elevation:</b>	GUP, 6469 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>	-1 °C	<b>Visibility</b>	15 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	, NM (GUP)	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	GALLUP MUNICIPAL (GUP)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	24	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	7312 ft / 100 ft		

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC): ARNOLD W SCOTT

Adopted Date: 06/21/2000

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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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.