



# Aviation Investigation Final Report

<b>Location:</b>	Bay St Louis, Mississippi	<b>Accident Number:</b>	DFW08CA010
<b>Date &amp; Time:</b>	October 11, 2007, 06:20 Local	<b>Registration:</b>	N997PT
<b>Aircraft:</b>	Eurocopter EC 130	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Positioning		

## Analysis

The commercial pilot was distracted by a short conversation with another pilot during an early morning preflight inspection of the helicopter. Following the preflight inspection of the turbine powered helicopter, the commercial pilot attempted to takeoff with the right side tie-down strap still securing the helicopter to the ground. Approximately 2-to-3- feet above ground level (agl), the pilot felt a tug as the slack was removed from the strap and the helicopter entered a dynamic rollover. The main rotor blades impacted the ground and the helicopter began to spin to the left. The pilot lowered the collective and the helicopter landed hard before coming to rest in an upright position. The pilot was able to exit unassisted. An examination of the helicopter revealed that the tail boom sustained structural damage during the accident.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's encounter with dynamic rollover as result of his inadequate preflight inspection.

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: HOVER

#### Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
2. DIVERTED ATTENTION - PILOT IN COMMAND

3. GROUND TIE-DOWN ROPE/STRAP - NOT REMOVED - PILOT IN COMMAND
4. (C) DYNAMIC ROLLOVER - ENCOUNTERED - PILOT IN COMMAND

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Occurrence #2: HARD LANDING  
Phase of Operation: HOVER

## Factual Information

The commercial pilot was distracted by a short conversation with another pilot during an early morning preflight inspection of the helicopter. Following the preflight inspection of the turbine powered helicopter, the commercial pilot attempted to takeoff with the right side tie-down strap still securing the helicopter to the ground. Approximately 2-to-3- feet above ground level (agl), the pilot felt a tug as the slack was removed from the strap and the helicopter entered a dynamic rollover. The main rotor blades impacted the ground and the helicopter began to spin to the left. The pilot lowered the collective and the helicopter landed hard before coming to rest in an upright position. The pilot was able to exit unassisted. An examination of the helicopter revealed that the tail boom sustained structural damage during the accident.

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	60, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	December 1, 2006
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	16000 hours (Total, all aircraft), 500 hours (Total, this make and model), 16000 hours (Pilot In Command, all aircraft), 375 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Eurocopter	<b>Registration:</b>	N997PT
<b>Model/Series:</b>	EC 130	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3809
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	September 1, 2007 100 hour	<b>Certified Max Gross Wt.:</b>	5350 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	2360 Hrs at time of accident	<b>Engine Manufacturer:</b>	Turbomeca
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	Arriel 2B1
<b>Registered Owner:</b>	Taylor Energy Company LLC	<b>Rated Power:</b>	847 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dawn
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	14°C / 12°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	BAY ST LOUIS, MS (HSA )	<b>Type of Flight Plan Filed:</b>	Unknown
<b>Destination:</b>	PATTERSON, LA (PTN )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	06:20 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	STENNIS INTL HSA	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>		<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	30.368333,-89.455001

## Administrative Information

<b>Investigator In Charge (IIC):</b>	LeBaron, Timothy
<b>Additional Participating Persons:</b>	Larry Wells; Jackson, MS; Jackson, MS, MS
<b>Original Publish Date:</b>	December 20, 2007
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=66892">https://data.nts.gov/Docket?ProjectID=66892</a>

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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](#).