



Aviation Investigation Final Report

Location: Brookeland, Texas Accident Number: CEN09CA290

Date & Time: May 10, 2009, 15:00 Local Registration: N602DB

Aircraft: BOLTON RICKY D ROTORWAY E Aircraft Damage: Substantial

Defining Event: Loss of control in flight **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The private pilot reported that while hovering prior to takeoff from his private property, a gust of wind blew the experimental helicopter sideways. The right skid caught the ground and the pilot then pulled on the collective, "a little too hard." The helicopter tail rotor then hit a tractor and the left skid hit the ground. The helicopter rolled coming to rest on its left side. The pilot was not injured. The winds at a local airport 15 miles to the north were reported to be from 170 degrees at 12 knots gusting to 17 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot failed to maintain control while hovering in gusty conditions.

Findings

Personnel issues Aircraft control - Pilot

Environmental issues Gusts - Response/compensation

Aircraft (general) - Not attained/maintained

Factual Information

History of Flight

| Maneuvering-hover | Loss of control in flight (Defining event) | |
|-------------------|--|--|
| Maneuvering-hover | Attempted remediation/recovery | |
| Maneuvering-hover | Abrupt maneuver | |
| Maneuvering-hover | Collision with terr/obj (non-CFIT) | |
| Landing | Dynamic rollover | |

Pilot Information

| Certificate: | Private | Age: | 60,Male |
|---------------------------|--|-----------------------------------|----------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Right |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 1 With waivers/limitations | Last FAA Medical Exam: | April 28, 2009 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | |
| Flight Time: | (Estimated) 300 hours (Total, all aircraft), 27 hours (Total, this make and model) | | |

Page 2 of 5 CEN09CA290

Aircraft and Owner/Operator Information

| Aircraft Make: | BOLTON RICKY D | Registration: | N602DB |
|-------------------------------|------------------------|-----------------------------------|-----------------|
| Model/Series: | ROTORWAY E | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental (Special) | Serial Number: | 6299 |
| Landing Gear Type: | Skid | Seats: | 2 |
| Date/Type of Last Inspection: | Unknown | Certified Max Gross Wt.: | 1500 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | AMA/EXPR |
| ELT: | | Engine Model/Series: | RI 600N |
| Registered Owner: | On file | Rated Power: | 147 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |
| | | | |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|--------------------------------------|-------------|
| Observation Facility, Elevation: | KJAS,213 ft msl | Distance from Accident Site: | |
| Observation Time: | 15:05 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | Scattered / 4100 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | Broken / 5500 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 12 knots / 17 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 170° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.01 inches Hg | Temperature/Dew Point: | 31°C / 22°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Brookeland, TX | Type of Flight Plan Filed: | Unknown |
| Destination: | Brookeland, TX | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | |
| | | | |

Page 3 of 5 CEN09CA290

Airport Information

| Airport: | Private Property | Runway Surface Type: | |
|----------------------|------------------|---------------------------|------|
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | None |

Wreckage and Impact Information

| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|-------------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 31.1525,-93.989723(est) |

Page 4 of 5 CEN09CA290

Administrative Information

| Investigator In Charge (IIC): | Gamble, William |
|-----------------------------------|---|
| Additional Participating Persons: | Randy E Burke; Federal Aviation Administration, FSDO; Houston, TX |
| Original Publish Date: | March 3, 2010 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=73816 |

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Page 5 of 5 CEN09CA290