

Aviation Investigation Final Report

| Location: | Grand Praire, Texas | Accident Number: | CEN14CA367 |
|-------------------------|---|----------------------|-------------|
| Date & Time: | July 15, 2014, 16:00 Local | Registration: | N350GP |
| Aircraft: | AMERICAN EUROCOPTER CORP AS350B3 | Aircraft Damage: | Substantial |
| Defining Event: | Hard landing | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Instructional | | |
| | | | |

Analysis

The flight was scheduled as recurrent training in helicopters; the foreign rated pilot was accompanied by a flight instructor, and an interpreter and observer who were seated in the back seats. After a series of maneuvers, the foreign pilot conducted a hovering autorotation, following directions from the flight instructor which were translated by the interpreter. During the autorotation, the helicopter yawed slightly right and settled to the ground. The instructor and observer noted that the landing did not feel that hard, but more like a firm or rough landing. The training flight continued with several other autorotations. During a post flight inspection of the helicopter, several wrinkles were found in the tail boom of the helicopter. Further examination of the helicopter revealed that the tail boom had sustained substantial damage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's inadequate supervision during a practice autorotation. Contributing to the accident was the pilot's hard landing during a practice autorotation.

Findings

| Personnel issues | Monitoring other person - Instructor/check pilot |
|------------------|--|
| Personnel issues | Aircraft control - Pilot |
| Personnel issues | Qualification/certification - Pilot |

Factual Information

History of Flight

| Emergency descent | Simulated/training event |
|-------------------------|-------------------------------|
| Autorotation | Hard landing (Defining event) |
| Landing-flare/touchdown | Hard landing |

Flight instructor Information

| Certificate: | Airline transport; Flight instructor | Age: | 56 |
|---------------------------|--|-----------------------------------|---------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | 4-point |
| Instrument Rating(s): | Airplane; Helicopter | Second Pilot Present: | Yes |
| Instructor Rating(s): | Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter | Toxicology Performed: | No |
| Medical Certification: | Class 2 With waivers/limitations | Last FAA Medical Exam: | July 14, 2014 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 7752 hours (Total, all aircraft), 192 hours (Total, this make and model), 7185 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft) | | |

Pilot Information

| Certificate: | Foreign | Age: | 56 |
|---------------------------|----------------------------------|-----------------------------------|---------|
| Airplane Rating(s): | None | Seat Occupied: | Right |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | 4-point |
| Instrument Rating(s): | None | Second Pilot Present: | Yes |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Unknown | Last FAA Medical Exam: | |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | |
| Flight Time: | 2500 hours (Total, all aircraft) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | AMERICAN EUROCOPTER CORP | Registration: | N350GP |
|----------------------------------|-------------------------------|-----------------------------------|-------------|
| Model/Series: | AS350B3 | Aircraft Category: | Helicopter |
| Year of Manufacture: | 2012 | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 7240 |
| Landing Gear Type: | High skid | Seats: | |
| Date/Type of Last Inspection: | July 14, 2014 100 hour | Certified Max Gross Wt.: | |
| Time Since Last Inspection: | | Engines: | Turbo shaft |
| Airframe Total Time: | 359 Hrs as of last inspection | Engine Manufacturer: | Turbomeca |
| ELT: | C126 installed | Engine Model/Series: | Arriel 2D |
| Registered Owner: | AIRBUS HELICOPTERS INC | Rated Power: | |
| Operator: | AIRBUS HELICOPTERS INC | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|---|-------------------------|---|-------------|
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 10 knots / 17 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 40° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.06 inches Hg | Temperature/Dew Point: | 31°C / 16°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | Grand Praire, TX (KGPM) | Type of Flight Plan Filed: | |
| Destination: | Grand Praire, TX (KGPM) | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | |

Airport Information

| Airport: | Grand Prairie Manicipal KGPM | Runway Surface Type: | |
|----------------------|------------------------------|---------------------------|--------------------------|
| Airport Elevation: | 588 ft msl | Runway Surface Condition: | |
| Runway Used: | | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | Simulated forced landing |

Wreckage and Impact Information

| Crew Injuries: | 2 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|-----------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 32.7,-97.048057 |

Administrative Information

| Investigator In Charge (IIC): | Hatch, Craig |
|--------------------------------------|---|
| Additional Participating Persons: | Michael Buckner; FAA FSDO; Irving, TX |
| Original Publish Date: | September 24, 2014 |
| 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=89671 |

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