

Aviation Investigation Final Report

| Location: | La Belle, Florida | Accident Number: | ATL02LA128 |
|-------------------------|----------------------------|------------------|-------------|
| Date & Time: | June 24, 2002, 09:00 Local | Registration: | N8486E |
| Aircraft: | Bell 47G-2A | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 Minor |
| Flight Conducted Under: | Part 137: Agricultural | | |

Analysis

The pilot was executing swath runs to apply herbicide solutions to weed plants. While finishing with the second load of spray, the pilot maneuvered to turn the helicopter around and struck unmarked power lines approximately 75 to 100 feet above the ground. The pilot then lost control of the helicopter, and it came down on its side and impacted trees. The pilot reported no mechanical malfunction. Examination of the wreckage revealed the main rotor system was damaged, the tail boom was separated, the canopy was shattered, and one skid was separated.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain visual lookout while maneuvering during an aerial application, which resulted in an in-flight collision with power lines and uncontrolled descent into terrain.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings 1. OBJECT - WIRE, TRANSMISSION 2. (C) VISUAL LOOKOUT - NOT MAINTAINED - PILOT IN COMMAND Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On June 24, 2002, at 0900 eastern daylight time, a Bell 47G-2A helicopter, N8486E, registered to and operated by Airwork Enterprises of Florida, Inc., collided with power lines while maneuvering in a grove in La Belle, Florida. The aerial application flight was operated by the pilot under the provisions of Title 14 CFR Part 137 with no flight plan filed. Visual meteorological conditions prevailed at the time of the accident. The commercial pilot, the sole occupant, received minor injuries, and the helicopter sustained substantial damage. The flight originated in the grove in La Belle, Florida, about 0800.

The pilot was executing swath runs to apply herbicide solutions to weed plants. While finishing with the second load of spray, the pilot maneuvered to turn the helicopter around and struck unmarked power lines approximately 75 to 100 feet above the ground. The pilot stated he was not aware the wires were there. The pilot then lost control of the helicopter, and it came down on its side and impacted trees. The pilot reported no mechanical malfunction with the helicopter.

| Examination of the wreckage revealed the main rotor system was damaged, th | he tall boom was |
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| separated, the canopy was shattered, and one skid was separated. | |

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| Certificate: | Commercial; Flight instructor | Age: | 46,Male |
| Airplane Rating(s): | None | Seat Occupied: | Front |
| Other Aircraft Rating(s): | Helicopter | Restraint Used: | |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | Helicopter | Toxicology Performed: | No |
| Medical Certification: | Class 2 Without waivers/limitations | Last FAA Medical Exam: | June 21, 2001 |
| Occupational Pilot: | Yes | Last Flight Review or Equivalent: | October 2, 2001 |
| Flight Time: | 3540 hours (Total, all aircraft), 350 hours (Total, this make and model), 45 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft) | | |

Pilot Information

Aircraft and Owner/Operator Information

| All chart and Owner/Op | | | |
|----------------------------------|---|-----------------------------------|-----------------|
| Aircraft Make: | Bell | Registration: | N8486E |
| Model/Series: | 47G-2A | Aircraft Category: | Helicopter |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Restricted (Special) | Serial Number: | 2679 |
| Landing Gear Type: | Skid | Seats: | 1 |
| Date/Type of Last Inspection: | Annual | Certified Max Gross Wt.: | 2800 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 7341 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Not installed | Engine Model/Series: | VO-540 |
| Registered Owner: | Airwork Enterprises of Florida, Inc. | Rated Power: | 260 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|---|-------------------|
| Observation Facility, Elevation: | RSW,9 ft msl | Distance from Accident Site: | 21 Nautical Miles |
| Observation Time: | 08:53 Local | Direction from Accident Site: | 239° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.11 inches Hg | Temperature/Dew Point: | 25°C / 24°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | La Belle, FL | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 08:00 Local | Type of Airspace: | Class G |

Wreckage and Impact Information

| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
|------------------------|---------|-------------------------|----------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Minor | Latitude, Longitude: | 26.744167,-81.433052 |

Administrative Information

| Investigator In Charge (IIC): | Smith, Carrol A. |
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| Additional Participating Persons: | Richard Kraemer; FAA - Ft. Lauderdale FSDO - 17; Ft. Lauderdale, FL |
| Original Publish Date: | April 15, 2003 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=55033 |

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