



Aviation Investigation Final Report

Location:	Joice, Iowa	Accident Number:	CEN11CA535
Date & Time:	August 1, 2011, 09:30 Local	Registration:	N51857
Aircraft:	TEXAS HELICOPTER CORP OH-13H/M74A	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that during an aerial application flight, he was paralleling a highway as he was applying chemical to a cornfield. He gained altitude to clear a homestead and then descended into the field to continue spraying. He reported that the helicopter impacted an unmarked wire that was strung diagonally between the road he was paralleling and the corner of the property. The helicopter impacted the field and the main rotor blades separated from the airframe, causing the helicopter to cartwheel prior coming to a stop. The helicopter sustained substantial damage to the main rotor blades and fuselage. The pilot reported that there was no mechanical malfunction or failure of the helicopter prior to the wire strike.

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 clearance from the wire.

Findings

Personnel issues	Incorrect action performance - Pilot
Environmental issues	Wire - Contributed to outcome
Personnel issues	Monitoring environment - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Uncontrolled descent	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying	Low altitude operation/event (Defining event)

Pilot Information

Certificate:	Commercial	Age:	25, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	December 20, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 30, 2011
Flight Time:	1840 hours (Total, all aircraft), 1400 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	TEXAS HELICOPTER CORP	Registration:	N51857
Model/Series:	OH-13H/M74A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	78-024
Landing Gear Type:	Skid	Seats:	1
Date/Type of Last Inspection:	March 1, 2011 Annual	Certified Max Gross Wt.:	2850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4723 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Not installed	Engine Model/Series:	VO-435-AIF
Registered Owner:	SCOTTS HELICOPTER SERVICE INC	Rated Power:	260 Horsepower
Operator:	SCOTTS HELICOPTER SERVICE INC	Operating Certificate(s) Held:	

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:		Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Joice, IA	Type of Flight Plan Filed:	None
Destination:	Joice, IA	Type of Clearance:	None
Departure Time:		Type of Airspace:	

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:	43.363334,-93.455833(est)

Administrative Information

Investigator In Charge (IIC):	Silliman, James
Additional Participating Persons:	Terry Warren; FAA Des Moines FSDO; Ankeny, IA
Original Publish Date:	October 17, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=81329

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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](#).