



Aviation Investigation Final Report

Location:	Ulysses, Kansas	Accident Number:	CEN21LA225
Date & Time:	May 18, 2021, 14:30 Local	Registration:	N176SJ
Aircraft:	Bell OH58A	Aircraft Damage:	Destroyed
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was performing aerial application operations when the helicopter collided with a power line and subsequently impacted terrain. The pilot was fatally injured. The accident occurred during the pilot's 21st pass over the field that day, and the pilot had been maneuvering to avoid the wire numerous times prior to the accident. Examination of the helicopter revealed no anomalies that would have precluded normal operation. The circumstances of the accident are consistent with the pilot's failure to maintain clearance from the power line during the aerial application flight.

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 a power line during the aerial application flight, which resulted in collision with the power line and subsequent impact with terrain.

Findings

Environmental issues	Wire - Effect on equipment
Personnel issues	Identification/recognition - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT) (Defining event)
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On May 18, 2021, about 1430 central daylight time, a Bell OH-58A helicopter, N176SJ, was destroyed when it was involved in an accident near Ulysses, Kansas. The pilot was fatally injured. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

The helicopter impacted a powerline while the pilot was applying chemicals to a field. The operator reported that the accident pass was the pilot's 21st pass over the field, and that the pilot had been maneuvering over the powerline during the previous passes. The loader who was at the scene reported that the helicopter passed the wires, and he heard two loud pops. The helicopter collided with terrain about 60° nose-low, and the loader called emergency services.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	47, Male
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	July 21, 2020
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 21, 2020
Flight Time:	(Estimated) 4500 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N176SJ
Model/Series:	OH58A NO SERIES	Aircraft Category:	Helicopter
Year of Manufacture:	1970	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	70-15556
Landing Gear Type:	High skid	Seats:	4
Date/Type of Last Inspection:	March 11, 2021 100 hour	Certified Max Gross Wt.:	
Time Since Last Inspection:	8382.7 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	as of last inspection	Engine Manufacturer:	Rolls-Royce
ELT:	Not installed	Engine Model/Series:	250-C20C
Registered Owner:	TRI ROTOR SPRAY & CHEMICAL	Rated Power:	425 Horsepower
Operator:	TRI-ROTOR CROP SERVICES LLC	Operating Certificate(s) Held:	Agricultural aircraft (137)
Operator Does Business As:	TRI-ROTOR CROP SERVICES LLC	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGCK,2882 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	13:54 Local	Direction from Accident Site:	54°
Lowest Cloud Condition:	Scattered / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.93 inches Hg	Temperature/Dew Point:	19°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ulysses, KS	Type of Flight Plan Filed:	None
Destination:	Ulysses, KS	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	37.565617,-101.37033(est)

The helicopter impacted a field and came to rest on its side about 150 yards from the power lines. All major components of the helicopter were located at the accident site. The forward cockpit area was crushed and distorted. Both main rotor blades were damaged and remained attached to the main rotor hub. The main rotor hub was impact separated from the transmission. Flight control continuity was established throughout the helicopter through areas that were fractured with signatures consistent with overload. A portion of the power line was found on the ground between the wire strike location and the wreckage. The helicopter was equipped with wire cutters, but they did not display signatures of damage or wire contact.

Medical and Pathological Information

The pilot succumbed to his injuries in the hospital 2 days after the accident. The Kearny County, Kansas, coroner issued a certificate of death and listed the cause of death as massive blunt trauma (to) head, torso, and extremities. Toxicology testing on the pilot's hospital admission blood was positive for norketamine (metabolite of anesthetic ketamine), famotidine (antacid), and ondansetron (antinausea medication). These medications were likely given to the pilot during postaccident medical treatment.

Administrative Information

Investigator In Charge (IIC): Aguilera, Jason

Additional Participating Persons: Michael LeBlanc; FAA FSDO; Wichita, KS

Original Publish Date: December 6, 2022

Last Revision Date:

Investigation Class: [Class 3](#)

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=103107>

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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](#).