



Aviation Investigation Final Report

Location:	Zaleski, Ohio	Accident Number:	CEN19FA072
Date & Time:	January 29, 2019, 06:50 Local	Registration:	N191SF
Aircraft:	Bell 407	Aircraft Damage:	Destroyed
Defining Event:	Unknown or undetermined	Injuries:	3 Fatal
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled - Air Medical (Medical emergency)		

Analysis

NTSB investigators traveled in support of this investigation and used data obtained from various sources to prepare this aircraft accident report.

The NTSB's full report is available at <http://www.ntsb.gov/investigations/AccidentReports/Pages/AccidentReports.aspx>. The Aircraft Accident Report number is NTSB/AAR-20/01.

On January 29, 2019, about 0650 eastern standard time, a single-engine, turbine-powered Bell 407 helicopter, N191SF, being operated as a helicopter air ambulance (HAA) flight, collided with forested terrain about 4 miles northeast of Zaleski, Ohio. The certificated commercial pilot, flight nurse, and flight paramedic died, and the helicopter was destroyed. The helicopter was registered to and operated by Viking Aviation, LLC, doing business as Survival Flight Inc., under Title 14 Code of Federal Regulations Part 135. Company flight-following procedures were in effect for the visual flight rules (VFR) flight, which departed Mount Carmel Hospital, Grove City, Ohio, about 0628 and was destined for Holzer Meigs Emergency Department, Pomeroy, Ohio, about 69 nautical miles southeast, to pick up a patient. Night visual meteorological conditions existed at the departure location, but available weather information indicated that snow showers and areas of instrument meteorological conditions (IMC) existed along the route of flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The NTSB determines that the probable cause of this accident was Survival Flight's inadequate management of safety, which normalized pilots' and operations control specialists' noncompliance with

risk analysis procedures and resulted in the initiation of the flight without a comprehensive preflight weather evaluation, leading to the pilot's inadvertent encounter with instrument meteorological conditions, failure to maintain altitude, and subsequent collision with terrain. Contributing to the accident was the Federal Aviation Administration's inadequate oversight of the operator's risk management program and failure to require Title 14 *Code of Federal Regulations* Part 135 operators to establish safety management system programs.

Findings

Personnel issues	Weather planning - Pilot
Environmental issues	Below VFR minima - Effect on operation
Personnel issues	Use of equip/system - Pilot
Aircraft	Altitude - Not attained/maintained
Environmental issues	(general) - Not specified
Organizational issues	Safety - Operator
Organizational issues	Standard operating practices - Operator
Organizational issues	Adequacy of policy/proc - Operator
Organizational issues	Oversight of operation - FAA/Regulator
Organizational issues	Operational procedures - FAA/Regulator
Organizational issues	Adequacy of safety program - Operator
Organizational issues	Adherence to safety program - Operator
Environmental issues	Snow - Not specified
Environmental issues	(general) - Availability of related info

Factual Information

History of Flight

Enroute	VFR encounter with IMC
Enroute	Unknown or undetermined (Defining event)

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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	34, Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument helicopter	Toxicology Performed:	Yes
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	November 18, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 27, 2018
Flight Time:	(Estimated) 1855 hours (Total, all aircraft), 83 hours (Total, this make and model), 1787 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N191SF
Model/Series:	407 No Series	Aircraft Category:	Helicopter
Year of Manufacture:	1996	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	53006
Landing Gear Type:	N/A; Skid	Seats:	4
Date/Type of Last Inspection:		Certified Max Gross Wt.:	5501 lbs
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:		Engine Manufacturer:	Rolls-Royce
ELT:	C126 installed, activated, did not aid in locating accident	Engine Model/Series:	250-C47B
Registered Owner:	N191SF LLC	Rated Power:	
Operator:	VIKING AVIATION INC	Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	Survival Flight Inc	Operator Designator Code:	KVHG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Night
Observation Facility, Elevation:	KUNI,765 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	11:55 Local	Direction from Accident Site:	151°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 2700 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	Unknown / Unknown
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	Unknown / Unknown
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	-6°C / -10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Grove City, OH	Type of Flight Plan Filed:	Company VFR
Destination:	Pomeroy, OH	Type of Clearance:	Unknown
Departure Time:	06:28 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	3 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	39.323333,-82.309448

Administrative Information

Investigator In Charge (IIC):	Williams, David
Additional Participating Persons:	David Gerlach; FAA; Washington, DC Todd Gentry; FAA; Washington, DC Jack Johnson; Rolls Royce Engines; Indianapolis, IN Gary Mercer; Viking Aviation LLC; Little Rock, AR Dane Immel; Woodward; Santa Clarita, CA
Original Publish Date:	June 10, 2020
Last Revision Date:	
Investigation Class:	Class 1
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98902

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).