



# **Aviation Investigation Final Report**

Location: Red Bud, Illinois Accident Number: CEN20LA400

Date & Time: September 19, 2020, 13:56 Local Registration: N60WD

Aircraft: Safari S Aircraft Damage: Destroyed

**Defining Event:** Loss of control in flight **Injuries:** 1 Fatal

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

Witnesses observed the helicopter in a 6 to 8 ft hover when it began "spinning out of control." It subsequently impacted a storage building before it came to rest on its left side adjacent to the building. A postimpact fire ensued and consumed the forward portion of the helicopter.

A postaccident examination did not reveal any anomalies consistent with a preimpact failure or malfunction; however, due to the extent of the postimpact fire, a complete examination of the helicopter was not possible. Although the witness's report of the helicopter spinning is consistent with a loss of control, the reason for the loss of control could not be determined based on the available information.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A loss of control for reasons that could not be determined.

## **Findings**

Not determined

Personnel issues	Aircraft control - Pilot
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(general) - Unknown/Not determined

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#### **Factual Information**

#### **History of Flight**

Maneuvering-low-alt flying	Loss of control in flight (Defining event)	
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)	

On September 19, 2020, about 1356 central daylight time, a Safari 400 helicopter, N60WD, was destroyed when it was involved in an accident near Red Bud, Illinois. The pilot was fatally injured. The helicopter was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

A witness was across the street mowing grass at the time of the accident when she saw the helicopter depart normally toward the east. About 15 minutes later, the helicopter approached from the south behind a funeral home located on the south side of the street, and hover-taxied along an area between a bank and a storage building where the helicopter was based. The witness looked toward the storage building and the "tail of the helicopter" appeared to contact the building. The helicopter subsequently came to rest on its left side adjacent to the building and a postimpact fire ensued.

A second witness observed the helicopter hovering about 6 to 8 ft above the ground when it began "spinning out of control." It started going "up and down" and finally "came straight down," and collided with the storage building.

Surveillance video footage from the bank depicted the helicopter hovering near a storage building shortly before the accident. The camera was motion-activated and there were significant time gaps in the footage. According to the time stamp on the video, between 1334:28 and 1334:35, the pilot hover taxied southbound between the bank and the storage building. Between 1355:59 and 1356:08, the pilot hover taxied northbound between the bank and the storage building. Upon reaching the north end of the building, the pilot turned right (toward the east). The video footage stopped even though the helicopter remained in the field of view. The footage picked up again at 1356:39 and depicted a fire adjacent to the storage building. The accident sequence itself was not captured. The helicopter appeared to be under control and operating normally during the time the camera was recording.

The helicopter came to rest on its left side against the storage building oriented toward the west. The forward portion of the helicopter was destroyed by the postimpact fire. Postaccident airframe and engine examinations did not reveal any anomalies; however, the airframe examination was hindered by the extent of the postimpact fire damage.

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#### **Pilot Information**

Certificate:	Commercial	Age:	74,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	None Expired	Last FAA Medical Exam:	May 13, 2003
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	320 hours (Total, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Safari	Registration:	N60WD
Model/Series:	S	Aircraft Category:	Helicopter
Year of Manufacture:	2002	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	S2114
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	0-360-J2A
Registered Owner:	On file	Rated Power:	145 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SAR,538 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	14:15 Local	Direction from Accident Site:	105°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.29 inches Hg	Temperature/Dew Point:	21°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Red Bud, IL (PVT )	Type of Flight Plan Filed:	None
Destination:	Red Bud, IL (PVT )	Type of Clearance:	None
Departure Time:	13:34 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	N/A PVT	Runway Surface Type:	
Airport Elevation:	490 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Traffic pattern

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	38.211666,-90.014999(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Clive Adams; FAA Flight Standards; Springfield, IL Ryan Enders; Lycoming Engines; Williamsport, PA
Original Publish Date:	June 28, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=101992

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.

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