



# **Aviation Investigation Final Report**

Location: Tulsa, Oklahoma Accident Number: GAA18CA435

Date & Time: July 23, 2018, 15:30 Local Registration: N866VP

Aircraft: Cessna 560 Aircraft Damage: Substantial

**Defining Event:** Birdstrike **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Positioning

### **Analysis**

The pilot reported that, during approach, he observed a bird flying nearby and then heard a "thump" and felt an impact above his head. The pilot landed the airplane without further incident.

Postaccident examination revealed that a bird had impacted the airplane's vertical stabilizer, which sustained substantial damage.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

### **Probable Cause and Findings**

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

The airplane's collision with a bird during approach.

### **Findings**

**Environmental issues** 

Animal(s)/bird(s) - Effect on equipment

# **Factual Information**

# **History of Flight**

Enroute Birdstrike (Defining event)
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### **Pilot Information**

Certificate:	Airline transport; Commercial	Age:	38,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	December 15, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 6, 2018
Flight Time:	(Estimated) 3130 hours (Total, all aircraft), 835 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### **Co-pilot Information**

Certificate:	Airline transport	Age:	64,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 23, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 1, 2017
Flight Time:	(Estimated) 5000 hours (Total, all aircraft), 275 hours (Total, this make and model), 4600 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Page 2 of 4 GAA18CA435

# **Aircraft and Owner/Operator Information**

Aircraft Make:CessnaRegistration:N866VPModel/Series:560 UndesignatAircraft Category:AirplaneYear of Manufacture:2006Amateur Built:Airworthiness Certificate:TransportSerial Number:560-0704Landing Gear Type:Retractable - TricycleSeats:10Date/Type of Last Inspection:UnknownCertified Max Gross Wt.:16630 lbsTime Since Last Inspection:Engines:2 Turbo fanAirframe Total Time:2574.4 Hrs at time of accidentEngine Manufacturer:P&WCELT:C126 installed, not activatedEngine Model/Series:PW535ARegistered Owner:Rated Power:3400 Lbs thrustOperator:Operating Certificate(s) Held:On-demand air taxi (135) BMA				
Year of Manufacture: 2006 Amateur Built:  Airworthiness Certificate: Transport Serial Number: 560-0704  Landing Gear Type: Retractable - Tricycle Seats: 10  Date/Type of Last Inspection: Unknown Certified Max Gross Wt.: 16630 lbs  Time Since Last Inspection: Engines: 2 Turbo fan  Airframe Total Time: 2574.4 Hrs at time of accident Engine Manufacturer: P&WC  ELT: C126 installed, not activated Engine Model/Series: PW535A  Registered Owner: Rated Power: 3400 Lbs thrust  Operator: Operator: Operating Certificate(s) Held:	Aircraft Make:	Cessna	Registration:	N866VP
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Registered Owner: Rated Power: 3400 Lbs thrust  Operator: Operating Certificate(s) Held: On-demand air taxi (135)	Airframe Total Time:	2574.4 Hrs at time of accident	Engine Manufacturer:	P&WC
Operator: Operating Certificate(s) On-demand air taxi (135) Held:	ELT:	C126 installed, not activated	Engine Model/Series:	PW535A
Held:	Registered Owner:		Rated Power:	3400 Lbs thrust
Operator Does Business As: OzAir Charter Service Operator Designator Code: 5BMA	Operator:			On-demand air taxi (135)
	Operator Does Business As:	OzAir Charter Service	Operator Designator Code:	5BMA

# Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTUL,650 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	273°
<b>Lowest Cloud Condition:</b>	Few / 12000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 16000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 21 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	33°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Springfield, MO (SGF)	Type of Flight Plan Filed:	IFR
Destination:	Tulsa, OK (TUL )	Type of Clearance:	IFR
Departure Time:		Type of Airspace:	Class C

Page 3 of 4 GAA18CA435

#### **Airport Information**

Airport:	TULSA INTL TUL	Runway Surface Type:	Asphalt
Airport Elevation:	677 ft msl	Runway Surface Condition:	Dry
Runway Used:	36L	IFR Approach:	Visual
Runway Length/Width:	6101 ft / 150 ft	VFR Approach/Landing:	Full stop

#### **Wreckage and Impact Information**

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	36.19889,-95.883888(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Swenson, Eric
Additional Participating Persons:	Jamie Pagan; FAA; Oklahoma City, OK
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97863

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <a href="here">here</a>.

Page 4 of 4 GAA18CA435