Aviation Investigation Final Report

Location:	Dell, Arkansas	**Accident Number:**	CEN20LA357
Date & Time:	August 21, 2020, 14:30 Local	**Registration:**	N759FA
Aircraft:	Air Tractor AT802	**Aircraft Damage:**	Substantial
Defining Event:	Aerodynamic stall/spin	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot departed on his fourth agricultural flight of the day to apply a fungicide agent to the crop. Two witnesses, who saw the airplane during the flight, indicated that the airplane made a steep turn, then lost altitude.

Postaccident examination of the accident site revealed, the airplane impacted terrain in a steep attitude. The front of the airplane was heavily damaged, the wings were accordioned-crushed along the wingspan, and the engine was embedded in the ground. Examination of the airframe and engine did not reveal any preimpact abnormalities that would have contributed to the accident.

Nonvolatile memory was successfully downloaded from the airplane's engine monitor. A review of the data noted that the accident flight was the 630th session and that no anomalies in the engine parameters were recorded before the end of the recording.

The accident is consistent with an aerodynamic stall following a loss of airspeed while the pilot maneuvered at low altitude.

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 airspeed while maneuvering at low altitude, which resulted in an aerodynamic stall and collision with terrain.

Findings

Aircraft	Airspeed - Not attained/maintained

Factual Information

History of Flight

Maneuvering-low-alt flying	Aerodynamic stall/spin (Defining event)

On August 21, 2020, about 1430 central daylight time, an Air Tractor AT-802A airplane, N759FA, was substantially damaged when it was involved in an accident near Del, Arkansas. The pilot was fatally injured. The flight was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

The accident flight was to apply a fungicide agent to the crop, and the pilot had performed three flights earlier in the day, before the accident flight. Two witnesses who saw the airplane during the flight indicated that the airplane made a steep turn, then lost altitude.

A technical representative from the airframe manufacturer and a Federal Aviation Administration inspector examined the airplane on site. The airplane impacted terrain in a nose-down attitude. The front of the airplane was heavily damaged, the wings were accordioned-crushed along the wingspan, and the engine was embedded in the ground.

An on-site examination of the airframe did not identify any preimpact abnormities that would have contributed to the accident.

A Satloc GPS was downloaded, and a portable Garmin Aera 660 GPS and an Electronics International MVP-50T engine monitor were sent to the National Transportation Safety Board's Vehicle Recorder lab for download.

The Garmin 660 GPS had impact damage and no data were recovered from the unit.

Nonvolatile memory was successfully downloaded from the MVP-50T engine monitor. A review of the data noted that the accident flight was the 630th session, which started recording at 1310:13.00 CDT and ended at 1434:45.00 CDT on August 21, 2020. Review of the data also noted no sudden or change in engine parameters before the end of the recording.

Pilot Information

Certificate:	Commercial	**Age:**	55
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Single
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	January 6, 2020
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	January 11, 2020
Flight Time:	17500 hours (Total, all aircraft), 9474 hours (Total, this make and model), 300 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	**Registration:**	N759FA
Model/Series:	AT802 A	**Aircraft Category:**	Airplane
Year of Manufacture:	2018	**Amateur Built:**	
Airworthiness Certificate:	Restricted (Special)	**Serial Number:**	802A-0759
Landing Gear Type:	Tailwheel	**Seats:**	1
Date/Type of Last Inspection:	March 24, 2020 100 hour	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Turbo prop
Airframe Total Time:	839.9 Hrs as of last inspection	**Engine Manufacturer:**	P&W
ELT:		**Engine Model/Series:**	PT6A-65AG
Registered Owner:	Tesk Aviation Llc	**Rated Power:**	
Operator:	Tesk Aviation Llc	**Operating Certificate(s) Held:**	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KBYH	**Distance from Accident Site:**	
Observation Time:	19:58 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:		**Visibility**	10 miles
Lowest Ceiling:	Broken / 3700 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	60°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.89 inches Hg	**Temperature/Dew Point:**	24°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Dell, AR	**Type of Flight Plan Filed:**	None
Destination:	Dell, AR	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	35.857658,-90.040421(est)

Administrative Information

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Danny Brickey; FAA FSDO; Little Rock, AR Dakota Lowe; Air Tractor Inc; Olney, TX Beverley Harvey; TSB Les Doud; Hartzell Propellers; OH
Original Publish Date:	June 7, 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=101845

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.