



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Morganza, Louisiana	Accident Number:	WPR19LA112
Date & Time:	April 16, 2019, 07:50 Local	Registration:	N599LA
Aircraft:	Air Tractor AT502	Aircraft Damage:	Substantial
Defining Event:	Flight control sys malf/fail	Injuries:	1 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

While performing an aerial application flight, the pilot heard a loud noise, followed by the nose of the airplane pitching up. The pilot applied full forward pressure on the flight control stick with no response. He then reduced the power to arrest the climb. A company employee who witnessed the accident reported that the airplane pitched up dramatically, hesitated, and then pitched almost straight nose-down before it impacted the ground.

A postaccident examination of the airplane revealed the aluminum elevator pushrod was disconnected from the forward idler and that the attachment bolt was missing. The missing attachment bolt was later found undamaged in the wreckage and no additional anomalies were noted with the airplane or engine. It is likely the noise the pilot heard was the attachment bolt separating from elevator pushrod. After the separation, the pilot would have had little to no elevator control, which is consistent with his description of the accident sequence.

Probable Cause and Findings

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

A loss of aircraft control due to the separation of the elevator pushrod attachment bolt.

Findings

Aircraft	Elevator control system - Failure
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Factual Information

History of Flight

Approach-VFR pattern final	Abrupt maneuver
Uncontrolled descent	Flight control sys malf/fail (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On April 16, 2019, at 0750 central daylight time, an Air Tractor AT-502B, N599LA, was substantially damaged when it was involved in an accident near Morganza, Louisiana. The commercial pilot was seriously injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial application flight.

According to the operator, the pilot heard a loud noise, followed by the nose of the airplane pitching up. The pilot applied full forward pressure on the flight control stick with no response. He then reduced the power to arrest the climb. A company employee, who witnessed the accident, reported that the airplane pitched up dramatically, hesitated, and then pitched almost straight nose-down before it impacted the ground.

A postaccident examination of the airplane revealed the aluminum elevator pushrod was disconnected from the forward idler and that the attachment bolt was missing. There was no damage to the forward idler or to the rod end bearing.

The missing attachment bolt was later found undamaged in the wreckage. No additional anomalies were noted with the flight controls, airplane, or engine.

Pilot Information

Certificate:	Commercial	Age:	63,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	0 hours (Total, all aircraft), 0 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N599LA
Model/Series:	AT502 B	Aircraft Category:	Airplane
Year of Manufacture:	2000	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	502B-0599
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 15, 2019 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	Turbo prop
Airframe Total Time:	12450.75 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	PT6A
Registered Owner:		Rated Power:	
Operator:		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:	KHZR	Distance from Accident Site:	
Observation Time:	07:27 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	12°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Port Barre, LA (17LS)	Type of Flight Plan Filed:	None
Destination:	Morganza, LA	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	

Airport Information

Airport:	Frey Farms	Runway Surface Type:	
Airport Elevation:	35 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	30.722499,-91.648056(est)

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye		
Additional Participating Persons:	Keenon Wood; Federal Aviation Administration; Baton Rouge, LA Kyle Schroeder; Air Tractor; Olney, TX		
Original Publish Date:	September 7, 2022	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99272		

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 [here](#).