Aviation Investigation Final Report

Location:	Bonita, Louisiana	**Accident Number:**	CEN24FA260
Date & Time:	July 11, 2024, 14:07 Local	**Registration:**	N6177J (A1); N795LA (A2)
Aircraft:	AIR TRACTOR INC AT-502B (A1); AIR TRACTOR INC AT-802A (A2)	**Aircraft Damage:**	Destroyed (A1); Minor (A2)
Defining Event:	Midair collision	**Injuries:**	1 Fatal (A1); 1 None (A2)
Flight Conducted Under:	Part 137: Agricultural (A1); Part 137: Agricultural (A2)		

Analysis

Both agricultural airplanes were en route to their respective agricultural aerial application locations when they collided about 175 ft above ground level (agl). After the collision, N6177J descended into the terrain and was destroyed and N795LA sustained minor damage and landed at the departure airstrip.

According to the pilot of N795LA, he departed the private airstrip and observed N6177J about 100 ft to his left at the same altitude. He pulled back on the control stick to avoid N6177J. Shortly after he felt an impact and heard a bang, but he was able to control the airplane after the collision.

The two pilots were not communicating by radio. The investigation revealed that both pilots were in positions to see the other airplane in time to avoid a collision. An examination of both airplanes revealed no evidence of any preexisting malfunctions or failures that would have prevented normal operation.

The toxicology results for the pilot of N6177J indicated that he had used the medications oxybutynin and diphenhydramine, both of which have a potential to cause sedation and cognitive and psychomotor slowing. Although the pilot may have been experiencing impairing effects of these medications at the time of the accident, no more specific conclusions about his impairment could be drawn. Additionally, his autopsy report indicated atherosclerotic disease, which is associated with some increased risk of experiencing a sudden impairing or incapacitating cardiovascular event, such as arrhythmia, heart attack, or stroke. There was no

autopsy evidence that such an event occurred; however, such an event does not leave reliable autopsy evidence if it occurs immediately before death.

Probable Cause and Findings

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

The failure of both pilots to see and avoid the other airplane while at low altitude enroute to their aerial application flights.

Findings

Personnel issues (A1)	Monitoring other aircraft - Pilot
Personnel issues (A2)	Monitoring other aircraft - Pilot

Factual Information

History of Flight

Maneuvering-low-alt flying (A1)	Midair collision (Defining event)
Uncontrolled descent (A1)	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying (A2)	Midair collision

On July 11, 2024, about 1407 central daylight time, an Air Tractor AT-502B airplane, N6177J, and an Air Tractor AT-802A airplane, N795LA, were involved in a midair collision near Bonita, Louisiana. The Air Tractor AT-502B was destroyed and the pilot was fatally injured. The Air Tractor AT-802A sustained minor damage and the pilot was not injured. Both aircraft were operated as Title 14 *Code of Federal Regulations* Part 137 aerial application flights.

According to recovered data and witness information, N795LA departed a company airstrip about 2 miles west of the collision location and the planned flight was to provide aerial application to a field about 12 miles east of the airstrip. N6177J departed a company airstrip about 3 miles northeast of the collision location and the planned flight was to provide aerial application to a field about 10 miles southwest of the airstrip (see figure 1).

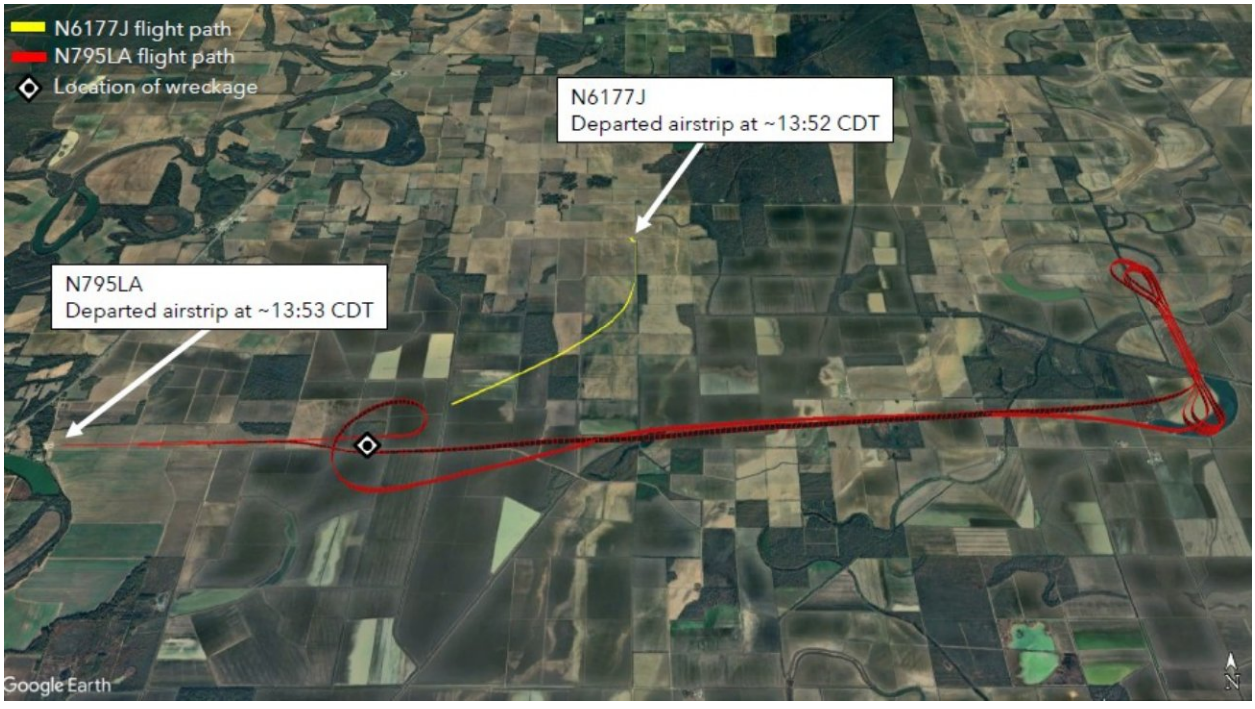

Figure 1. Overview of the airplanes' departure locations and flight paths.

According to the pilot of N795LA, he departed the private airstrip and was traveling east about 200 ft above ground level. About 2 miles after departure, the pilot observed N6177J about 100 ft to his left at the same altitude. The pilot of N795LA pulled back on the control stick to avoid N6177J. Shortly after, he felt an impact and heard a bang, but was able to control the airplane after the collision. The pilot circled the area, noticed N6177J had impacted the terrain, and observed a small ground fire. Due to the unknown damage to his airplane and with the airplane being loaded with chemical, the pilot decided to complete his aerial application flight. He then returned to the airstrip and landed the airplane with the tailwheel landing gear missing from the airplane.

A witness, who was the loader for N795LA and located at the company airstrip, stated that he observed N795LA take off from the airstrip and fly east, as planned. Above a distant tree line, he observed N6177J transitioning from the northeast to the southwest and then the collision between the two airplanes. He observed one airplane descend into the terrain and then saw smoke; the other airplane continued in flight. Shortly thereafter, N795LA returned to the airstrip.

According to the operators of both airplanes, neither pilot provided radio communications during flights.

N6177J was equipped with a Satloc M3 Bantam aerial guidance system and N795LA was equipped with a Satloc G4 aerial guidance system. The M3 device and the G4 data files were sent to the NTSB Vehicle Records Laboratory for download and analysis of the data.

The data revealed that N6177J departed the airstrip northeast of the accident site about 1352 and started to travel toward the southwest. N795LA departed from the airstrip west of the accident site about 1353 and started to travel toward the east. N6177J's data ended at 1353:32 in the vicinity of the wreckage location (see figure 2). The data revealedN795LA continued to an application area to the east before returning to land on its originating airstrip about 1406.

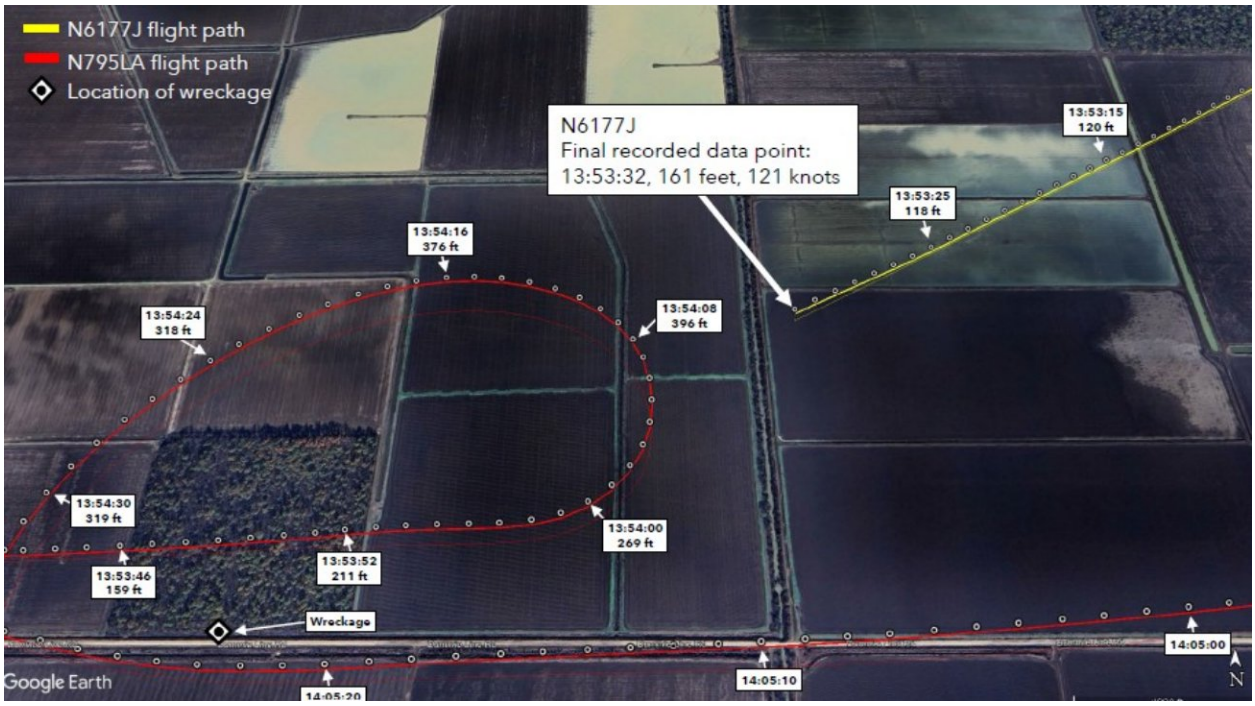

Figure 2. Overlay of the flight paths for both airplanes and wreckage site.

Based on the relative positions of both airplanes, as N795LA was on its easterly heading, N6177J would have been at about the pilot's11 o'clock position. Simultaneously, about 30 seconds before the collision, as N6177J was flying on the southwesterly heading, N795LA would have been about the 1 o'clock position. Just before the collision, the data from N795LA indicated it was at 175 ft altitude and about 125 miles per hour groundspeed. N795LA was in a consistent gradual climb after takeoff, and N6177J's altitude varied between 100 and 150 ft after takeoff. N6177J's data ended about 20 seconds before the collision (the device manufacturer indicated that if the device abruptly loses power during an accident, up to 30 seconds of data stored in a volatile buffer may be missing from the data stored on the internal card).

Pilot Information (A1)

Certificate:	Commercial	**Age:**	74,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Single
Other Aircraft Rating(s):	None	**Restraint Used:**	4-point
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:**	December 5, 2023
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	February 27, 2024
Flight Time:	32100 hours (Total, all aircraft)		

Pilot Information (A2)

Certificate:	Commercial	**Age:**	72,Male
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:**	
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	January 24, 2024
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	May 24, 2024
Flight Time:	35700 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information (A1)

Aircraft Make:	AIR TRACTOR INC	**Registration:**	N6177J
Model/Series:	AT-502B	**Aircraft Category:**	Airplane
Year of Manufacture:	1995	**Amateur Built:**	
Airworthiness Certificate:	Restricted (Special)	**Serial Number:**	502B-0327
Landing Gear Type:	Tailwheel	**Seats:**	1
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	8000 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	8480.8 Hrs at time of accident	**Engine Manufacturer:**	P&W
ELT:	Not installed	**Engine Model/Series:**	PT6A SERIES
Registered Owner:	MCGINTY FLYING SERVICE LLC	**Rated Power:**	500 Horsepower
Operator:	MCGINTY FLYING SERVICE LLC	**Operating Certificate(s) Held:**	Agricultural aircraft (137)

Aircraft and Owner/Operator Information (A2)

Aircraft Make:	AIR TRACTOR INC	**Registration:**	N795LA
Model/Series:	AT-802A	**Aircraft Category:**	Airplane
Year of Manufacture:	2023	**Amateur Built:**	
Airworthiness Certificate:	Restricted (Special)	**Serial Number:**	802A-1007
Landing Gear Type:	Tailwheel	**Seats:**	1
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	16000 lbs
Time Since Last Inspection:		**Engines:**	1 Turbo prop
Airframe Total Time:	1247.4 Hrs	**Engine Manufacturer:**	P&W CANADA
ELT:	Not installed	**Engine Model/Series:**	PT6A-65AG
Registered Owner:	WILMOT AIRPLANE RENTALS LLC	**Rated Power:**	1300 Horsepower
Operator:	ArkIaFlyers, Inc	**Operating Certificate(s) Held:**	Agricultural aircraft (137)

An examination of the AT-502B and AT-802A planforms revealed that, with the low-wing design, downward and forward visibility was most restricted about the pilot’s 9:00 (o’clock) to 9:30 and 2:30 to 3:00 positions. Upward visibility would be restricted by the cockpit window and door frames and the cockpit roof.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KBQP,167 ft msl	**Distance from Accident Site:**	17 Nautical Miles
Observation Time:	14:15 Local	**Direction from Accident Site:**	232°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.06 inches Hg	**Temperature/Dew Point:**	32°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Jones, LA (A1); Bonita, LA (A2)	**Type of Flight Plan Filed:**	None (A1); None (A2)
Destination:	Jones, LA (A1); Bonita, LA (A2)	**Type of Clearance:**	None (A1); None (A2)
Departure Time:	14:05 Local (A1); 14:05 Local (A2)	**Type of Airspace:**	Class G (A1); Class G (A2)

The sun position data at 1407 near Bonita, Louisiana, included an azimuth of 231.34° with an altitude of 73.64° above the horizon. The sky was clear at the time of the accident.

Wreckage and Impact Information (A1)

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	N/A	**Aircraft Fire:**	On-ground
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	32.929721,-91.616178(est)

Wreckage and Impact Information (A2)

Crew Injuries:	1 None	**Aircraft Damage:**	Minor
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	32.929721,-91.616178(est)

Postaccident examination of the accident site revealed N6177J was highly fragmented, and the debris came to rest in wooded terrain, on a gravel roadway, and in adjacent roadway ditches. The outboard 6-ft section of N6177J's left wing was separated and came to rest in the wooded terrain. The separated wing structure exhibited a semi-circular impact and black rubber transfer marks, consistent with the size of N795LA's main landing gear tire (see figure 3). N6177J's left horizontal stabilizer, about mid-span and mid-chord, was deflected upward and exhibited a witness mark and black rubber transfer mark, consistent with the size of N795LA's tailwheel tire.

Figure 3. N6177J's separated outboard left wing.

The underside of N795LA's spreader exhibited yellow paint transfer marks and shards of paint and fiberglass, consistent with N6177J's left wing tip. N795LA's tailwheel and fork were found in a rice field about 750 ft east of the estimated collision location.

N6177J's 3-blade propeller assembly remained attached to the engine propeller shaft and forward compressor section. The 3 blades were bent aft, twisted in the direction of rotation, and all 3 blade tips were separated.

N6177J was equipped with standard navigation and strobe lights on the wing tips and empennage. In addition, the forward fuselage (nose) contained two pulsating LED lights. N795LA was equipped with standard navigation and strobe lights on the wing tips and empennage.

Postaccident examination of both airplanes revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

Medical and Pathological Information

According to an autopsy report from the Morehouse Parish Coroner's Office, Bastrop, Louisiana, the cause of death of the AT-502B pilot was multiple blunt force injuries and the manner of death was accident. The autopsy identified mild-to-moderate atherosclerotic disease of the pilot's coronary arteries, aortic valve, and abdominal aorta.

The pilot's postmortem toxicology results included oxybutynin and its active metabolite desethyl oxybutynin was detected in heart blood and urine, as well as diphenhydramine in heart blood and urine.

Oxybutynin is a prescription oral anticholinergic medication commonly used to treat symptoms of an overactive bladder. Oxybutynin commonly carries a warning that it may cause central nervous system side effects including sedation and confusion, and that users should not drive or operate heavy machinery until they know how the drug affects them. Desethyl oxybutynin is an active metabolite of oxybutynin.

Diphenhydramine is a sedating antihistamine medication widely available over the counter in multiple sleep aids and cold and allergy products. Diphenhydramine can cause cognitive and psychomotor slowing and drowsiness and often carries a warning about driving and operating machinery.

Additional Information

On August 8, 2022, the Professional Aerial Applicator's Support System (PAASS) published a safety bulletin on avoiding mid-air collisions. The bulletin reminded pilots of the PAASS slogan, "Ferry above five (hundred) and stay alive." The bulletin also stated that ferrying above 500 ft agl greatly increases the chances of avoiding a collision with another agricultural aircraft making an application.

According to the AT-502B airplane flight manual, with the airplane's hopper at an estimated full capacity, sea level altitude conditions, and a temperature of about 30° C, the airplane would have a maximum climb rate of 567 ft per minute. The distance from the departure point to the accident was about 3 miles. The estimated altitude of both airplanes at the time of the collision was about 175 ft agl.

Preventing Similar Accidents

See and Be Seen (SA-045)

The Problem

Adequate visual lookout while flying in visual meteorological conditions is critical to avoiding other aircraft. While accidents can occur in high-traffic areas (near airports), they can also occur in cruise flight.

All pilots can be vulnerable to distractions in the cockpit, and the presence of technology has introduced challenges to the see-and-avoid concept. Aviation applications on portable electronic devices (PEDs) such as cell phones, tablets, and handheld GPS units, while useful, can lead to more head-down time, limiting a pilot's ability to see other aircraft.

What can you do?

- Be vigilant and use proper techniques to methodically scan for traffic throughout your flight, not only in high-volume traffic areas.
- Divide your attention inside and outside the aircraft and minimize distractions (including nonessential conversations, photography or sightseeing activities, and PED use) that may degrade your ability to maintain awareness of other aircraft.
- Make your aircraft as visible as possible to other aircraft by turning on available lights, including anticollision lights, and consider using high-intensity discharge or LED lighting.
- Clearly communicate your intentions and use standard phraseology, known distances, and obvious ground references to alert other pilots of your location.

- Recognize that some conditions make it harder to see other aircraft, such as operating in areas where aircraft could be masked by surrounding terrain or buildings and when sun glare is present.
- Encourage passengers to help look for traffic and, during instructional flights, ensure that one pilot is always responsible for scanning for traffic.
- Effectively use on-board traffic advisory systems, when available, to help visually acquire and avoid other aircraft and not as a substitute for an outside visual scan.

See https://www.ntsb.gov/Advocacy/safety-alerts/Documents/SA-045.pdf for additional resources.

The NTSB presents this information to prevent recurrence of similar accidents. Note that this should not be considered guidance from the regulator, nor does this supersede existing FAA Regulations (FARs).

Administrative Information

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Cory Titmus; FAA ; Baton Rouge, LA Kyle Schroeder; Air Tractor; Olney, TX
Original Publish Date:	October 22, 2025
Last Revision Date:	
Investigation Class:	Class 3
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=194675

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