



Aviation Investigation Final Report

Location:	Onalaska, Texas	Accident Number:	CEN22LA386
Date & Time:	August 9, 2022, 17:09 Local	Registration:	N830DA
Aircraft:	AIR TRACTOR INC AT-802A	Aircraft Damage:	Substantial
Defining Event:	Dragged wing/rotor/float/other	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot was participating in firefighting operations and reported seven water tank re-fills (scoops) from the lake from the accident location before he stopped to refuel. Upon returning for the eighth scoop, the wind had increased, and the lake surface conditions were rougher than before. The pilot found it difficult to fill the water tank in the rough surface conditions and decided to abort his scoop run early. He closed the water filling scoops while trying to keep the nose of the airplane straight. He added power and rudder and had not transitioned to flight when the nose veered uncontrollably, and the airplane rotated almost 180°. The floats separated from the airplane and the right wing struck the water and sustained substantial damaged.

Examination of the airplane revealed no mechanical malfunctions or anomalies that would have precluded normal operation. Damage signatures did not indicate the airplane hit an object in the water. Recorded data showed the propeller rpm decreased to zero over three seconds, followed by the airplane rotating 153° to the right. A weather report from a nearby airport showed gusty wind conditions and the terminal aerodrome forecast (TAF) predicted thunderstorms in the vicinity around the time of the accident.

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 directional control during takeoff from a lake in gusting wind conditions.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	High wind - Response/compensation
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Takeoff	Loss of control on ground
Takeoff	Dragged wing/rotor/float/other (Defining event)

On August 9, 2022, about 1709 central daylight time, an Air Tractor AT-802A, N830DA, was substantially damaged when it was involved in an accident on Lake Livingston, near Onalaska, Texas. The pilot was not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 137 aerial firefighting flight.

According to the pilot, he was flying as part of a formation of three firefighting airplanes that had been dispatched to a fire between Groveton and Corrigan, Texas. After 7 water “scooping” iterations, the flight of three refueled, then returned to the lake to “scoop” more water. The pilots noted that the wind had changed and estimated the wind to be at least 20 knots. The lake looked rougher than before, but they agreed it looked workable.

The accident pilot stated that the approach and touchdown were normal, but the water was “very choppy.” The pilot decided to abort the water scooping run early because of the lake’s rough surface conditions. He raised the scoops while trying to keep the nose of the airplane straight. He described the airplane at this point as being solidly on the water and not transitioning. He continued to add power and rudder when the nose of the airplane veered uncontrollably and spun almost 180° around its vertical axis. The floats separated from the airplane and the right wing was substantially damaged. The airplane came to a stop in an upright position, the pilot egressed, swam away from it, and was rescued by a civilian boat.

The airplane was recovered from the lake and examined. The examination revealed no evidence of any preimpact mechanical malfunctions or anomalies. No evidence was found to suggest that the airplane impacted an object in the lake.

According to data downloaded from the airplane’s Electronics International MVP-50T electronic engine display, at 1709:02 the propeller rpm began to decrease from 1,660 rpm. At 17:09:05, the propeller rpm was at zero and over the course of the next five seconds, the airplane heading changed from 170° to 323° (about 30° per second).

The reported weather conditions at Conroe/North Houston Regional Airport (CXO), Conroe, Texas, around the time of the accident included wind from 120° at 10 knots with gusts to 20 knots. The TAF for the airport predicted thunderstorms in the vicinity around the time of the accident.

Pilot Information

Certificate:	Airline transport	Age:	60, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	Airship	Restraint Used:	5-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 6, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 21, 2021
Flight Time:	22788 hours (Total, all aircraft), 397 hours (Total, this make and model), 17288 hours (Pilot In Command, all aircraft), 206 hours (Last 90 days, all aircraft), 87 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR INC	Registration:	N830DA
Model/Series:	AT-802A	Aircraft Category:	Airplane
Year of Manufacture:	2022	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	802A-0930
Landing Gear Type:	None; Amphibian	Seats:	2
Date/Type of Last Inspection:	August 3, 2022 100 hour	Certified Max Gross Wt.:	16000 lbs
Time Since Last Inspection:		Engines:	1
Airframe Total Time:	105 Hrs at time of accident	Engine Manufacturer:	
ELT:	Installed, not activated	Engine Model/Series:	
Registered Owner:	AERO SPRAY INC DBA Dauntless Air	Rated Power:	
Operator:	AERO SPRAY INC DBA Dauntless Air	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:	KCXO, 245 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:	Few / 6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 20 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	36°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lufkin, TX (LFK)	Type of Flight Plan Filed:	None
Destination:	Lufkin, TX (LFK)	Type of Clearance:	VFR
Departure Time:	17:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	ANGELINA COUNTY LFK	Runway Surface Type:	
Airport Elevation:	295 ft msl	Runway Surface Condition:	Water-choppy
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.774627, -95.11671 (est)

Administrative Information

Investigator In Charge (IIC):	Teilhaber, Ryan
Additional Participating Persons:	Thomas Fowles; FAA; Dallas, TX Dakota Lowe; Air Tractor; Olney, TX
Original Publish Date:	April 18, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=105736

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](#).