



# National Transportation Safety Board Aviation Accident Final Report

<b>Location:</b>	Newport, AR	<b>Accident Number:</b>	FTW01LA147
<b>Date &amp; Time:</b>	06/18/2001, 2000 CDT	<b>Registration:</b>	N6082B
<b>Aircraft:</b>	Air Tractor AT-502B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

During takeoff from a grass airstrip behind another agricultural airplane of the same type, the agricultural airplane encountered wake turbulence. The pilot turned the airplane to the left to "try and get out of it." The airplane's left wing and left main landing gear struck the ground, the airplane bounced on its right wing, and landed on its empennage. Subsequently, the airplane came to rest upright in a field. The pilot stated that the accident could have been prevented if he had waited "about one more minute" before taking off.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the loss of control during takeoff initial climb as a result of encountering wake turbulence due to the pilot's failure to recognize the hazard and delay the takeoff.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
2. (F) WAKE TURBULENCE - ENCOUNTERED - PILOT IN COMMAND
3. (F) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

-----

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

4. TERRAIN CONDITION - GROUND

## Factual Information

On June 18, 2001, at 2000 central daylight time, an Air Tractor AT-502B agricultural airplane, N6082B, was substantially damaged following an encounter with wake turbulence during initial takeoff climb near Newport, Arkansas. The commercial pilot, sole occupant of the airplane, was not injured. The airplane was registered to and operated by Ellis Flying Service, Inc., of Newport, Arkansas. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The local flight was departing at the time of the accident.

The pilot stated that he was attempting to takeoff to the south from a grass airstrip behind another AT-502B, when shortly after rotation, his airplane encountered wake turbulence. The pilot turned the airplane to the left to "try and get out of it." The airplane's left wing and left main landing gear struck the ground, the airplane bounced on its right wing, and landed on its empennage. Subsequently, the airplane came to rest upright in a bean field. The pilot stated that the accident could have been prevented if he had waited "about one more minute" before taking off.

The pilot reported that the winds were calm at the time of the accident.

According to the FAA inspector, who responded to the accident site, both wings and the empennage sustained structural damage.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	02/27/2001
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	02/17/2000
<b>Flight Time:</b>	6808 hours (Total, all aircraft), 3500 hours (Total, this make and model), 6550 hours (Pilot In Command, all aircraft), 350 hours (Last 90 days, all aircraft), 300 hours (Last 30 days, all aircraft), 15 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N6082B
Model/Series:	AT-502B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	502B-0274
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	06/01/2001, 100 Hour	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:	132 Hours	Engines:	1 Turbo Prop
Airframe Total Time:	3222 Hours at time of accident	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	PT6A-34
Registered Owner:	Ellis Flying Service Inc.	Rated Power:	750 hp
Operator:	Ellis Flying Service Inc.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	Code

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32° C
Precipitation and Obscuration:			
Departure Point:	Newport, AR	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	CDT	Type of Airspace:	Class G

## Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	237 ft	Runway Surface Condition:	Unknown
Runway Used:	18	IFR Approach:	Unknown
Runway Length/Width:	2500 ft / 90 ft	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:	

## Administrative Information

Investigator In Charge (IIC):	Douglas Wigington	Report Date:	09/27/2001
Additional Participating Persons:	James L Sager; FAA FSDO; Little Rock, AR		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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](#).