



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Panama City, FL	<b>Accident Number:</b>	ANC05CA040
<b>Date &amp; Time:</b>	03/02/2005, 0645 CST	<b>Registration:</b>	N5006V
<b>Aircraft:</b>	Air Tractor AT-602	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

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## Analysis

The operator reported that the certificated commercial pilot was departing from a private airstrip in a turbine-powered airplane with 3,500 pounds of fertilizer on board. The operator noted that the accident flight was the pilot's first flight of the day, and that there was "heavy frost on the aircraft" prior to departure. During the pilot's takeoff run on the rough and uneven airstrip, the airplane's main wheels struck a bump that bounced the airplane into the air. Once the airplane was airborne, it rolled left, and the left wing struck the ground. The operator wrote, in part: "At this point, the aircraft was trying to gain altitude, but stalled and went into the trees under full power..." The airplane sustained substantial damage to the wings, fuselage, and empennage. The operator reported that there were no preaccident mechanical anomalies with the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to remove frost from the airplane which resulted in an inadvertent stall/mush during the takeoff/initial climb, and an in-flight collision with trees. Contributing to the accident were the rough and uneven airstrip, and degraded aircraft performance due to frost on the wing.

## Findings

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Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. TERRAIN CONDITION - ROUGH/UNEVEN
2. LIFT-OFF - PREMATURE

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

3. WING - FROST
4. (C) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND
5. (F) AIRCRAFT PERFORMANCE - DETERIORATED
6. AIRSPEED(VS) - NOT ATTAINED - PILOT IN COMMAND
7. STALL/MUSH - INADVERTENT - PILOT IN COMMAND

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

8. OBJECT - TREE(S)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	47, 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>	05/07/2004
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	04/08/2004
<b>Flight Time:</b>	27701 hours (Total, all aircraft), 10400 hours (Total, this make and model), 26100 hours (Pilot In Command, all aircraft), 87 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Air Tractor	<b>Registration:</b>	N5006V
<b>Model/Series:</b>	AT-602	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Restricted	<b>Serial Number:</b>	602-0422
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	01/08/2005, 100 Hour	<b>Certified Max Gross Wt.:</b>	12500 lbs
<b>Time Since Last Inspection:</b>	86.6 Hours	<b>Engines:</b>	1 Turbo Prop
<b>Airframe Total Time:</b>	8129.6 Hours	<b>Engine Manufacturer:</b>	Pratt & Whitney Canada
<b>ELT:</b>		<b>Engine Model/Series:</b>	PT6A-45R
<b>Registered Owner:</b>	Gentry's Flying Service	<b>Rated Power:</b>	1050 hp
<b>Operator:</b>	Gentry's Flying Service	<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	GOYG

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-2° C
Precipitation and Obscuration:			
Departure Point:	Panama City, FL	Type of Flight Plan Filed:	Company VFR
Destination:	Panama City, FL	Type of Clearance:	None
Departure Time:	0645 CST	Type of Airspace:	Class E

## Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:		Runway Surface Condition:	Rough
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## 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:	30.200000, -85.666667

## Administrative Information

Investigator In Charge (IIC):	Clinton O Johnson	Report Date:	07/07/2005
Additional Participating Persons:	James Fox; Federal Aviation Administration; Birmingham,, AL		
Publish Date:			
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
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> .		

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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](#).