



# Aviation Investigation Final Report

<b>Location:</b>	Garden City, Texas	<b>Accident Number:</b>	DFW06CA149
<b>Date &amp; Time:</b>	June 1, 2006, 11:00 Local	<b>Registration:</b>	N7318C
<b>Aircraft:</b>	Air Tractor AT-401	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Flight test		

## Analysis

The non-instrument rated commercial pilot departed on a maintenance test flight in a single-engine agricultural airplane. During the test flight the airplane's radial engine lost power and the pilot elected to execute a forced landing to a cotton field. The airplane sustained structural damage during the forced landing. There was no fire and the pilot was able to egress the airplane unassisted. The winds at the time of the accident were reported from 040 degrees at 11 knots, gusting to 18 knots. The Federal Aviation Administration (FAA) inspector, who traveled to the accident site, confirmed the airplane sustained structural damage during the forced landing. Additionally, the inspector reported that the aircraft ran out of fuel. Despite repeated attempts by the Investigator-In-Charge (IIC), the pilot failed to return a completed Pilot Operator Aircraft Accident Report Form (NTSB Form 6120.1).

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper in-flight planning resulting in the loss of engine power due to fuel exhaustion. A contributing factor was the lack of suitable terrain for the forced landing.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CRUISE

Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. TERRAIN CONDITION - CROP
4. (F) TERRAIN CONDITION - NONE SUITABLE

## Factual Information

The non-instrument rated commercial pilot departed on a maintenance test flight in a single-engine agricultural airplane. During the test flight the airplane's radial engine lost power and the pilot elected to execute a forced landing in a cotton field. The airplane sustained structural damage during the forced landing. There was no fire and the pilot was able to egress the airplane unassisted. The winds at the time of the accident were reported from 040 degrees at 11 knots, gusting to 18 knots. The Federal Aviation Administration (FAA) inspector, who traveled to the accident site, confirmed the airplane sustained structural damage during the forced landing. Additionally, the inspector reported that the aircraft ran out of fuel. Despite repeated attempts by the Investigator-In-Charge (IIC), the pilot failed to return a completed Pilot Operator Aircraft Accident Report Form (NTSB Form 6120.1).

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<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 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	January 1, 2006
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1500 hours (Total, all aircraft), 50 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Air Tractor	<b>Registration:</b>	N7318C
<b>Model/Series:</b>	AT-401	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	401-0680
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	6000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Pratt & Whitney
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	R-1820
<b>Registered Owner:</b>	Summers Spraying Service, Inc.	<b>Rated Power:</b>	600 Horsepower
<b>Operator:</b>	Roger Quinn	<b>Operating Certificate(s) Held:</b>	
<b>Operator Does Business As:</b>	Summers Spraying Service, Inc.	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	BPG	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	10:44 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Scattered / 3100 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots / 18 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	40°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.21 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Garden City, TX	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Garden City, TX	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Hatch, Craig
<b>Additional Participating Persons:</b>	Bruce Jeffco; Lubbock, Texas
<b>Original Publish Date:</b>	November 29, 2006
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=63813">https://data.nts.gov/Docket?ProjectID=63813</a>

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](#).