



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	MCGEHEE, AR	<b>Accident Number:</b>	FTW94LA256
<b>Date &amp; Time:</b>	08/01/1994, 1900 CDT	<b>Registration:</b>	N45297
<b>Aircraft:</b>	AIR TRACTOR AT-401	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None

**Flight Conducted Under:** Part 91: General Aviation - Ferry

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## Analysis

AERIAL APPLICATION WORK WAS COMPLETED AT ONE LOCATION. THE AIRPLANE WAS IN CRUISE FLIGHT AT 700 FEET ABOVE THE GROUND TO ANOTHER LOCATION, WHEN A TOTAL LOSS OF ENGINE POWER OCCURRED. AN EMERGENCY DESCENT AND APPROACH WAS MADE TO A COTTON TURN ROW. DURING THE LANDING ROLL ON THE ROUGH TURN ROW, THE AIRPLANE GROUND LOOPED. EXAMINATION OF THE ENGINE REVEALED THE FAILURE OF A BEARING IN THE BLOWER SECTION CAUSED THE ENGINE TO SEIZE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: TOTAL LOSS OF ENGINE POWER AS THE ENGINE SEIZED DUE TO A BLOWER BEARING FAILURE. A FACTOR WAS THE LACK OF SUITABLE TERRAIN FOR THE FORCED LANDING.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) ENG ASSEMBLY,BLOWER/IMPELLER/INTEGRAL SUPERCHARGER - FAILURE,TOTAL  
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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: LANDING - ROLL

### Findings

2. (F) TERRAIN CONDITION - NONE SUITABLE  
3. TERRAIN CONDITION - ROUGH/UNEVEN  
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Occurrence #4: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

4. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

## Factual Information

On August 1, 1994, at 1900 central daylight time, an Air Tractor AT-401, N45297, was substantially damaged during a forced landing near McGehee, Arkansas. The commercial pilot was not injured. Visual meteorological conditions prevailed for the aerial application flight.

The pilot and operator reported the following information. The flight departed the Weatherly Farm near Kelso, Arkansas, at 1845. The airplane was being ferried to Jerome, Arkansas, for additional aerial application flights. During cruise at 700 feet above the ground, a total mechanical loss of engine power occurred. An emergency descent and approach was made to a cotton turn row. During the landing roll on the rough turn row, the airplane ground looped.

An examination of the engine by the FAA inspector and the operator revealed the engine was mechanically seized. The operator reported a bearing failure in the engine blower section caused the power loss.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	29, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; 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>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	08/30/1993
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	5000 hours (Total, all aircraft), 1000 hours (Total, this make and model), 4900 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR	Registration:	N45297
Model/Series:	AT-401 AT-401	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Restricted	Serial Number:	401-0760
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	100 Hour	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	R-1340-AN1
Registered Owner:	D & M FARMS FLYING SERVICE	Rated Power:	600 hp
Operator:	EVANS FLYING SERVICE	Operating Certificate(s) Held:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32° C
Precipitation and Obscuration:			
Departure Point:	KELSO, AR (NONE)	Type of Flight Plan Filed:	None
Destination:	JEROME, AR (NONE)	Type of Clearance:	None
Departure Time:	1845 CDT	Type of Airspace:	Class G

## 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):** JOYCE M SMITH, **Report Date:** 11/14/1994

**Additional Participating Persons:** EARL D NEWBERRY; 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 [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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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](#).