



# **Aviation Investigation Final Report**

Location: Coahoma, Texas Accident Number: DFW05CA003

Date & Time: October 13, 2004, 16:50 Local Registration: N8886S

Aircraft: Air Tractor AT-301 Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 137: Agricultural

### **Analysis**

While spraying cotton for boll weevil eradication, the airplane developed a vibration. Thinking that the spray pump was about to sling a blade, the 3,600-hour commercial pilot elected to make a precautionary landing on a gravel road. After touch down the pilot was unable to maintain directional control and departed the right side of the road. The right wheel then contacted a dirt embankment and the airplane turned sharply to the right, resulting in the collapse of the left main landing gear. The airplane came to rest, upright, in a ditch. The winds were reported from 140 degrees at 6 knots.

## **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 landing. A contributing factor was the lack of suitable terrain for landing.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING

#### Findings

1. PRECAUTIONARY LANDING - ATTEMPTED - PILOT IN COMMAND

2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

#### Findings

3. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

4. (F) TERRAIN CONDITION - NONE SUITABLE

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Occurrence #3: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Page 2 of 6 DFW05CA003

#### **Factual Information**

On October 13, 2004, approximately 1650 central daylight time, an Air Tractor AT-301 single engine, tailwheel-equipped, agricultural airplane, N8886S, was substantially damaged following a loss of control during landing near Coahoma, Texas. The commercial pilot, the sole occupant, was not injured. The airplane was registered to and operated by ANF Air Service Incorporated of Garwood, Texas. Visual meteorological conditions prevailed and a company flight plan was filed for the 14 Code of Federal Regulations Part 137 agricultural flight. The local flight originated from Big Spring Airport (BPG) near Big Spring, Texas, approximately one hour earlier.

According to the 3,600-hour pilot, while spraying cotton for boll weevil eradication, the airplane developed a vibration. Thinking that the spray pump was about to sling a blade, the pilot elected to make a precautionary landing on a gravel road. The pilot reported that after touch down, he was unable to maintain directional control and departed the right side of the road. The right wheel then contacted a dirt embankment and the airplane turned sharply to the right, resulting in the collapse of the left main landing gear. The airplane came to rest, upright, in a ditch.

An inspector from the Federal Aviation Administration (FAA) evaluated the damage to the airplane. He reported that the fuselage was buckled and that both wings were twisted.

At 1653 central daylight time, the weather observation facility at Midland International Airport (MAF) near Midland, Texas, which is located approximately 50 miles west of the accident site, reported the wind from 140 degrees at 6 knots, visibility 10 statute miles, clear of clouds, temperature 72 degrees Fahrenheit, dew point 53 degrees Fahrenheit, and a barometric pressure setting of 29.92 inches of Mercury.

Page 3 of 6 DFW05CA003

### **Pilot Information**

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Certificate:	Commercial	Age:	52,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	February 24, 2004
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3600 hours (Total, all aircraft), 1630 days, all aircraft)	hours (Total, this make and model), 1	00 hours (Last 90

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Air Tractor	Registration:	N8886S
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0227
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Pratt & Whitney
ELT:		Engine Model/Series:	R-1340
Registered Owner:	ANF Air Service Inc.	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	A3NG

Page 4 of 6 DFW05CA003

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MAF	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	22°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BIG SPRING, TX (21XS)	Type of Flight Plan Filed:	Company VFR
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.30722,-101.342781

Page 5 of 6 DFW05CA003

#### **Administrative Information**

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	
Original Publish Date:	January 24, 2005
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60325

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.

Page 6 of 6 DFW05CA003