

Aviation Investigation Final Report

Location:	Waco, Texas	Accident Number:	WPR14CA002
Date & Time:	October 1, 2013, 17:30 Local	Registration:	N1013R
Aircraft:	AIR TRACTOR INC AT 401	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that during takeoff from a grass strip, he lost control of the airplane when it encountered a gust of wind causing the airplane to roll to the right. The right wing contacted the high vegetation along the airstrip and the airplane subsequently nosed over. Both wings and the rudder were substantially damaged. The pilot reported no preimpact mechanical malfunctions or failure with the airplane that would have precluded normal operation.

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 the takeoff in gusting wind conditions.

Findings	
Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Gusts - Not specified

Factual Information

History of Flight

Takeoff

Loss of control on ground (Defining event)

Pilot Information

Certificate:	Commercial	Age:	49
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	January 31, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	October 20, 2012
Flight Time:	8400 hours (Total, all aircraft), 8000 hours (Total, this make and model), 8300 hours (Pilot In Command, all aircraft), 300 hours (Last 90 days, all aircraft), 100 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR INC	Registration:	N1013R
Model/Series:	AT 401 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1989	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0723
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	July 10, 2013 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	68 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6575 Hrs at time of accident	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	1340 AN1
Registered Owner:	CORPORA AERIAL SERVICE	Rated Power:	600 Horsepower
Operator:	CORPORA AERIAL SERVICE	Operating Certificate(s) Held:	Agricultural aircraft (137)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Few	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 25 knots	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Waco, TX	Type of Flight Plan Filed:	None
Destination:	Waco, TX	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	PRIVATE None	Runway Surface Type:	Grass/turf
Airport Elevation:	10 ft msl	Runway Surface Condition:	Dry
Runway Used:	None	IFR Approach:	None
Runway Length/Width:	2000 ft / 20 ft	VFR Approach/Landing:	None

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:	31.549722,-97.129165(est)

Administrative Information

FAA-FSDO; Dallas, TX
3
ort documents the factual circumstances of this accident as described
gov/Docket?ProjectID=88171

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 <u>here</u>.