



Aviation Investigation Final Report

Location:	Minot, North Dakota	Accident Number:	CEN11CA570
Date & Time:	August 3, 2011, 18:30 Local	Registration:	N8764S
Aircraft:	AIR TRACTOR INC AT-301	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot reported that he was returning from an aerial application training flight when the accident occurred. The airplane initially tracked the runway centerline during the landing rollout. The pilot noted that the landing gear seemed to shake, and he pulled back on the control stick and applied both brakes in response. At that point, the airplane veered to the left and subsequently ground looped. The airplane departed the runway pavement and the left main landing gear partially collapsed, allowing the left wing to contact the ground. The airplane sustained substantial damage to the left wing. The pilot reported that there were no failures or malfunctions associated with the airplane prior to the accident. A postaccident examination of the tail wheel assembly revealed no anomalies. The pilot reported that an approximate 80-degree right crosswind at 19 knots, gusting to 22 knots, existed during the accident landing.

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 crosswind landing, resulting in a ground loop.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Crosswind - Contributed to outcome

Factual Information

History of Flight

Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion

Pilot Information

Certificate:	Commercial	Age:	32, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	November 2, 2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 28, 2011
Flight Time:	259 hours (Total, all aircraft), 7 hours (Total, this make and model), 178 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIR TRACTOR INC	Registration:	N8764S
Model/Series:	AT-301	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0186
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 30, 2011 Annual	Certified Max Gross Wt.:	5000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	9428 Hrs as of last inspection	Engine Manufacturer:	P&W
ELT:	Not installed	Engine Model/Series:	R1340 SERIES
Registered Owner:	Pioneer AgViation, Inc.	Rated Power:	600 Horsepower
Operator:	Pioneer AgViation, Inc.	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:	MOT,1716 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	18:54 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	19 knots / 22 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	32°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Minot, ND (MOT)	Type of Flight Plan Filed:	None
Destination:	Minot, ND (MOT)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	

Airport Information

Airport:	Minot International MOT	Runway Surface Type:	Concrete
Airport Elevation:	1716 ft msl	Runway Surface Condition:	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	7700 ft / 150 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	48.257499,-101.277778(est)

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Rodney A Vigstol; FAA-Fargo Flight Standards; Fargo, ND
Original Publish Date:	October 17, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=81484

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