



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	PARMA, Idaho	Accident Number:	GAA19CA163
Date & Time:	March 11, 2019, 14:30 Local	Registration:	N400DQ
Aircraft:	Air Tractor AT 400A	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot of the tailwheel-equipped airplane reported that, during the landing roll, the tail "lifted back up" due to a "wind gust" and that the airplane then veered left, spun, exited the runway, and the right wing impacted muddy terrain.

The airplane sustained substantial damage to the right wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The pilot reported the wind was light and variable at 5 knots.

An automated weather observation station located about 15 nautical miles from the accident site reported that, about 30 minutes before the accident, the wind was from 150° at 4 knots and that, about 30 minutes after the accident, the wind was from 120° at 5 knots. The pilot landed the airplane on runway 30.

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 in variable wind conditions, which resulted in the right wing impacting muddy terrain.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Variable wind - Effect on operation

Factual Information

History of Flight

Landing-landing roll	Other weather encounter
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	64,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	4-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:	June 14, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 2, 2019
Flight Time:	(Estimated) 9033.7 hours (Total, all aircraft), 2109.6 hours (Total, this make and model), 8992.7 hours (Pilot In Command, all aircraft), 27.3 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N400DQ
Model/Series:	AT 400A No Series	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	301-0343
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	June 10, 2018 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:	at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	PT6A-15AG
Registered Owner:		Rated Power:	680 Horsepower
Operator:		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:	KONO,2193 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	348°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	8°C / -5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PARMA, ID (50S)	Type of Flight Plan Filed:	None
Destination:	PARMA, ID (50S)	Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Parma 50S	Runway Surface Type:	Asphalt;Ice
Airport Elevation:	2228 ft msl	Runway Surface Condition:	Wet
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	2700 ft / 50 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:	43.778888,-116.938613(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Dan Frandson; FAA; Boise, ID
Original Publish Date:	November 6, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99095

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).