



Aviation Investigation Final Report

Location: Kenmare, North Dakota Accident Number: CEN12LA344

Date & Time: June 4, 2012, 09:30 Local Registration: N4547Q

Aircraft: Air Tractor AT401 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

The pilot was attempting to take off for an agricultural application flight with the airplane loaded near gross weight. During the takeoff roll, the pilot thought that the airplane would not attain flight. The pilot aborted the takeoff about halfway down the runway without dumping the load of agricultural applicant. With about 400 feet of runway remaining, the pilot applied reverse thrust, and the airplane ground looped. Examination of the airplane revealed no preimpact mechanical malfunctions or failures 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 an aborted takeoff.

Findings

Aircraft Directional control - Not attained/maintained

Personnel issues Aircraft control - Pilot

Personnel issues Forgotten action/omission - Pilot

Factual Information

History of Flight

Takeoff Miscellaneous/other

Takeoff-rejected takeoff Attempted remediation/recovery

Takeoff-rejected takeoff Loss of control on ground (Defining event)

Takeoff-rejected takeoffCollision with terr/obj (non-CFIT)

On June 4, 2012, about 0930 central daylight time, an Air Tractor Inc AT-401, N4547Q, impacted terrain during an aborted takeoff on runway 26 at Kenmare Municipal Airport (7K5), Kenmare, North Dakota. The pilot aborted the takeoff after he thought the airplane performance was degraded, and the airplane ground looped. The commercial pilot was uninjured. The airplane sustained substantial damage to the right wing. The airplane was registered to the pilot and operated by Northern Ag Service under the provisions of 14 Code of Federal Regulations Part 137 as an aerial application flight. Visual meteorological conditions prevailed and a flight plan had not been filed. The local flight was originating at the time of the accident.

The pilot stated that the purpose of the flight was to spray fungicide on winter wheat. The pilot reported that the airplane weight was 7,723.5 pounds and the maximum gross weight of the airplane was 8,000 pounds. During the takeoff roll on runway 26 (3,700 feet by 60 feet, dry asphalt), he made the decision to abort the takeoff when the airplane was about half down the runway, or about 1,900 feet down the runway. The engine instrument indications of 96 percent torque and 645 degrees inter-turbine temperature "looked ok." He said that he made the decision to abort the takeoff because the airplane "did not feel like it was going to fly." As the airplane slowed and about three-quarters down the runway, or about 2,775 feet down the runway, he placed the engine power lever in reverse. The airplane ground looped 180 degrees. The pilot stated that if he had dumped the fungicide, he could have possibly avoided the accident.

According to a Federal Aviation inspector, examination of the airplane revealed no mechanical anomalies with the airplane that would have precluded normal operation.

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Pilot Information

Certificate:	Commercial	Age:	43,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):		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:	June 20, 2011
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	August 30, 2011
Flight Time:	5433 hours (Total, all aircraft), 474 hours (Total, this make and model), 40 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Air Tractor	Registration:	N4547Q
Model/Series:	AT401 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	401-0792
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	April 27, 2012 Annual	Certified Max Gross Wt.:	8000 lbs
Time Since Last Inspection:		Engines:	1 Turbo prop
Airframe Total Time:	5138.9 Hrs at time of accident	Engine Manufacturer:	Walter
ELT:	Not installed	Engine Model/Series:	M601E-11
Registered Owner:	Individual	Rated Power:	751 Horsepower
Operator:	Northern Ag Service	Operating Certificate(s) Held:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MIB,1667 ft msl	Distance from Accident Site:	32 Nautical Miles
Observation Time:	08:55 Local	Direction from Accident Site:	135°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.96 inches Hg	Temperature/Dew Point:	21°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	Kenmare, ND (7K5)	Type of Flight Plan Filed:	None
Destination:	Kenmare, ND (7K5)	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	

Airport Information

Airport:	Kenmare Municipal Airport 7K5	Runway Surface Type:	Asphalt
Airport Elevation:	1962 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	3700 ft / 60 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:	48.667499,-102.0475(est)

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Administrative Information

Investigator In Charge (IIC): Gallo, Mitchell

Additional Participating Persons:

Original Publish Date: July 29, 2013

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=83881

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.

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