



National Transportation Safety Board Aviation Accident Data Summary

Location:	Virден, IL	Accident Number:	CEN15LA335
Date & Time:	08/01/2015, 1340 CDT	Registration:	N502LH
Aircraft:	AIR TRACTOR INC AT 502B	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that the airplane had just been loaded and that he was beginning his sixth agricultural application flight of the day. He noted that, during the previous flights, the wind was from the southwest-southeast and less than 5 knots. Before departing on the sixth flight, he checked the wind sock, which indicated that the wind was from the southwest. He also checked his handheld GPS, which indicated that the local area wind was mainly from the west at 3 to 5 knots. The pilot started the takeoff roll on the runway heading west and noted that, three-quarters of the way down the runway, the airspeed had not yet reached takeoff speed. He jettisoned some of the load so that the airplane could clear the corn at the end of the runway. When the airplane cleared the corn, the pilot ceased the jettison. However, the airplane then began to descend, so the pilot jettisoned more of the load. The airplane continued to descend, banked hard left, and impacted the ground.

The pilot reported that there were no mechanical malfunctions with the airplane that would have precluded normal operation. The airplane was only about 30 lbs below its maximum gross weight. Witnesses stated that, immediately after the accident, the wind was from the southeast about 6 knots, which would have resulted in a quartering tailwind during the takeoff. It is likely that the combined effects of the airplane's near maximum gross weight and the quartering tailwind degraded the airplane's climb performance during takeoff.

Flight Events

Takeoff - Collision with terr/obj (non-CFIT)
Takeoff - Loss of lift
Takeoff - Other weather encounter
Takeoff - Attempted remediation/recovery
Takeoff - Loss of control in flight

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to establish a proper airspeed during takeoff with the airplane near its maximum gross weight and with a quartering tailwind.

Findings

Aircraft-Aircraft oper/perf/capability-Aircraft capability-Takeoff distance-Capability exceeded - C
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Climb rate-Not attained/maintained - C
Aircraft-Aircraft oper/perf/capability-Aircraft capability-Maximum weight-Not specified - C
Personnel issues-Task performance-Use of equip/info-Use of checklist-Pilot - C
Environmental issues-Conditions/weather/phenomena-Wind-Tailwind-Effect on operation - C

Pilot Information

Certificate:	Commercial	Age:	60
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane; Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	11710 hours (Total, all aircraft), 430 hours (Total, this make and model), 11576 hours (Pilot In Command, all aircraft), 290 hours (Last 90 days, all aircraft), 137 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	AIR TRACTOR INC	Registration:	N502LH
Model/Series:	AT 502B	Engines:	Turbo Prop
Operator:	C & L HOLZWARTH INC	Engine Manufacturer:	Pratt & Whitney
Air Carrier Operating Certificate:	Agricultural Aircraft (137)	Engine Model/Series:	PT6A-34A
Flight Conducted Under:	Part 137: Agricultural		

Meteorological Information and Flight Plan

Observation Facility, Elevation:		Weather Information Source:	Pilot
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	4 knots, 230°
Temperature:	27° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	VIRDEN, IL (25IL)	Destination:	VIRDEN, IL (25IL)

Airport Information

Airport:	HOLZWARTH FLYING SERVICE (25IL)	Runway Surface Type:	Asphalt
Runway Used:	27	Runway Surface Condition:	Dry
Runway Length/Width:	2640 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Joshua D Lindberg	Adopted Date:	01/05/2016
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=91708		

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.