



Aviation Investigation Final Report

Location:	Dansville, New York	Accident Number:	GAA18CA502
Date & Time:	August 4, 2018, 14:00 Local	Registration:	N851EJ
Aircraft:	WSK PZL MIELEC M-18A	Aircraft Damage:	Substantial
Defining Event:	Low altitude operation/event	Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot reported that he was performing an agricultural application flight to a corn field, which had a tree line running west to east on the north side of the field and another tree line running north to south on the east end of the field. He was making application passes from east to west and started at the south side of the field progressing northward toward the tree line with each pass. He added that he noticed that the wind speed increased to about 10 to 12 mph. During the second to last spray pass, while heading west, he came over the east end tree line and descended close to the corn. About 300 ft into the field, the airplane began to descend rapidly, and he pitched the airplane's nose up. He added that the descent continued and that the airplane began to lose airspeed. The landing gear struck the corn, and the airplane impacted terrain and came to rest inverted.

The pilot added that he believed a combination of descending air that rolled over the north line of trees, wind shear, the low-altitude flying, and reduced margin of error for the proper application of pesticide caused the accident.

The airplane sustained substantial damage to the empennage.

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

A weather station, located about 3 miles northeast of the accident site reported, about the time of the accident, temperature 85.3°F, dew point 68.3°F, and wind from 293° at 6 mph, gusting to 8 mph.

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 clearance from crops during an agricultural application flight.

Findings

Aircraft	Altitude - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	(general) - Effect on operation
Environmental issues	Tree(s) - Contributed to outcome

Factual Information

History of Flight

Maneuvering-low-alt flying	Low altitude operation/event (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	30,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	November 27, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 23, 2017
Flight Time:	(Estimated) 1396 hours (Total, all aircraft), 28.3 hours (Total, this make and model), 1339 hours (Pilot In Command, all aircraft), 101.9 hours (Last 90 days, all aircraft), 65.8 hours (Last 30 days, all aircraft), 7.3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	WSK PZL MIELEC	Registration:	N851EJ
Model/Series:	M-18A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1Z017-24
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 7, 2018 Annual	Certified Max Gross Wt.:	10340 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2795.1 Hrs as of last inspection	Engine Manufacturer:	WSK-PZL
ELT:	Installed, not activated	Engine Model/Series:	ASZ-62IR-M18
Registered Owner:		Rated Power:	980 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:	KDSV, 662 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	17:54 Local	Direction from Accident Site:	356°
Lowest Cloud Condition:	Few / 4900 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	29°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hornell, NY (HTF)	Type of Flight Plan Filed:	None
Destination:	Hornell, NY (HTF)	Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

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:	42.27222,-77.684722(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Timothy Tressel; FAA; Rochester, NY
Original Publish Date:	March 18, 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=98135

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