



Aviation Investigation Final Report

Location: Pemberton Twp, New Jersey **Accident Number**: ERA17CA251

Date & Time: July 19, 2017, 18:45 Local Registration: N9270W

Aircraft: Weatherly 620 Aircraft Damage: Substantial

Defining Event: Collision during takeoff/land **Injuries:** 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

According to the pilot, during takeoff, when the agricultural application airplane was about 15 ft above ground level, he noticed a decrease in engine performance, verified that the engine controls were full forward, and turned the fuel boost pump on. He dropped the hopper load; however, the airplane's performance continued to decrease. The pilot chose to land the airplane straight ahead, and the airplane impacted trees before coming to rest inverted in a bog.

Postaccident examination of the airplane revealed substantial damage to the fuselage and wings. Further, after the airplane was removed from the bog, the Federal Aviation Administration inspector who responded to the accident found feathers associated with a Canada goose near the engine and damaged propeller. According to the pilot, there were no preimpact mechanical failures or malfunctions with the airframe or engine 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:

An in-flight collision with a bird during takeoff, which resulted in a partial loss of engine power and subsequent collision with trees and terrain.

Findings

Environmental issues

Animal(s)/bird(s) - Ability to respond/compensate

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Factual Information

History of Flight

Takeoff	Birdstrike
Takeoff	Loss of engine power (partial)
Landing	Collision during takeoff/land (Defining event)

Pilot Information

Certificate:	Airline transport; Commercial; Flight engineer; Flight instructor	Age:	53,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 23, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 10, 2017
Flight Time:	17330 hours (Total, all aircraft), 1525 hours (Total, this make and model), 6500 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 0.5 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Weatherly	Registration:	N9270W
Model/Series:	620 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1505
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	December 10, 2016 Annual	Certified Max Gross Wt.:	10582 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6698 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	Not installed	Engine Model/Series:	R-985 Series
Registered Owner:	JERSEY DEVIL DUSTERS LLC	Rated Power:	450 Horsepower
Operator:	JERSEY DEVIL DUSTERS LLC	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:	WRI,131 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	18:58 Local	Direction from Accident Site:	20°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	33°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pemberton Twp, NJ (PVT)	Type of Flight Plan Filed:	None
Destination:	Pemberton Twp, NJ (PVT)	Type of Clearance:	None
Departure Time:	18:45 Local	Type of Airspace:	

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Airport Information

Airport:	AG Air Strip - Rake Pond Farms PVT	Runway Surface Type:	Grass/turf
Airport Elevation:	20 ft msl	Runway Surface Condition:	Dry
Runway Used:	PVT	IFR Approach:	None
Runway Length/Width:	2100 ft / 100 ft	VFR Approach/Landing:	Forced landing

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:	40.298419,-74.520263(est)

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Administrative Information

Investigator In Charge (IIC):	Kemner, Heidi	
Additional Participating Persons:	Kirk Jaeger; FAA/FSDO; Philadelphia, PA	
Original Publish Date:	October 17, 2017	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=95618	

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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