



# Aviation Investigation Final Report

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<b>Location:</b>	New Bern, North Carolina	<b>Accident Number:</b>	ATL07LA012
<b>Date &amp; Time:</b>	October 21, 2006, 16:05 Local	<b>Registration:</b>	N9176R
<b>Aircraft:</b>	Cessna A188B	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

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## Analysis

According to the pilot, during the takeoff climb at about 100 to 150 feet above ground level the engine shut down. He rolled the airplane level, pushed the nose over, and attempted a landing in a turf field. The airplane struck the ground substantially damaging the airplane. The pilot egressed the airplane with assistance from witnesses. Examination of the airplane by an FAA Inspector found the landing gear, spray equipment, and the right wing separated from the airframe. Fuel was observed in both fuel tanks. Examination of the engine found the propeller separated from the engine crankshaft and the engine was seized due to impact damage. The engine was rotated 90-degrees within the engine mounts. Both magnetos and the fuel manifold were observed impact damaged. Oil was observed on the oil dipstick when it was removed. According to witnesses on the ground the engine was not running smoothly from the time of taxi through the takeoff and subsequent engine shut-down. The FAA Inspector further stated that the aircraft operator did not hold an FAA 14 CFR Part 137 Aerial Application Certificate at the time of the accident, as required by FAA regulation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of engine power for undetermined reasons and the pilot's continued operation of the airplane with known deficiencies with the engine, which resulted in a forced landing and in-flight collision with the ground.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - CONTINUED - PILOT IN COMMAND
2. REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

### Findings

3. TERRAIN CONDITION - GROUND

## Factual Information

On October 21, 2006, at 1605 eastern daylight time, a Cessna A188B, N9176R, registered to a private owner, operating as a aerial application flight, collided with the ground during following loss of engine power shortly after takeoff from a field in New Bern, North Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The airplane sustained substantial damage, and the airline transport-rated pilot received minor injuries. The flight was originating at the time of the accident,

According to the pilot, during the takeoff climb at about 100 to 150 feet above ground level the engine shut down. He rolled the airplane level, pushed the nose over, and attempted a landing in a turf field. The airplane struck the ground substantially damaging the airplane. The pilot egressed the airplane with assistance from witnesses.

Examination of the airplane by an FAA Inspector found the landing gear, spray equipment, and the right wing separated from the airframe. Fuel was observed in both fuel tanks. Examination of the engine found the propeller separated from the engine crankshaft and the engine was seized due to impact damage. The engine was rotated 90-degrees within the engine mounts. Both magnetos and the fuel manifold were observed impact damaged. Oil was observed on the oil dipstick when it was removed. According to witnesses on the ground the engine was not running smoothly from the time of taxi through the takeoff and subsequent engine shut-down. The FAA Inspector further stated that the aircraft operator did not hold an FAA 14 CFR Part 137 Aerial Application Certificate at the time of the accident, as required by FAA regulation.

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	38, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	June 1, 2006
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	January 1, 2006
<b>Flight Time:</b>	4945 hours (Total, all aircraft), 3000 hours (Total, this make and model), 4859 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 145 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N9176R
<b>Model/Series:</b>	A188B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	18802140T
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	June 1, 2001 Annual	<b>Certified Max Gross Wt.:</b>	4200 lbs
<b>Time Since Last Inspection:</b>	214 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6184.97 Hrs at time of accident	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	IO-570D
<b>Registered Owner:</b>	Joseph L. Lawrence	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>	William James Brinkley	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	Western Carolina AgAir	<b>Operator Designator Code:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	GSO,925 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	16:53 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	50°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.05 inches Hg	<b>Temperature/Dew Point:</b>	16°C / 3°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	New Bern, NC (PVT )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:05 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	<b>Runway Surface Type:</b>
<b>Airport Elevation:</b>	<b>Runway Surface Condition:</b>
<b>Runway Used:</b>	<b>IFR Approach:</b> None
<b>Runway Length/Width:</b>	<b>VFR Approach/Landing:</b> Forced landing;Straight-in

## Wreckage and Impact Information

<b>Crew Injuries:</b> 1 Minor	<b>Aircraft Damage:</b> Substantial
<b>Passenger Injuries:</b>	<b>Aircraft Fire:</b> None
<b>Ground Injuries:</b> N/A	<b>Aircraft Explosion:</b> None
<b>Total Injuries:</b> 1 Minor	<b>Latitude, Longitude:</b> 35.10889,-77.044998

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Wilson, Ralph
<b>Additional Participating Persons:</b>	Richard D Litka; Greensboro FSDO; Greensboro, NC
<b>Original Publish Date:</b>	December 20, 2007
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=64765">https://data.ntsb.gov/Docket?ProjectID=64765</a>

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](#).