



Aviation Investigation Final Report

Location:	Elwood, Nebraska	Accident Number:	CEN09CA429
Date & Time:	July 11, 2009, 20:30 Local	Registration:	N4990Q
Aircraft:	Cessna A188B	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The pilot attempted to takeoff from a private grass strip and struck standing corn at the departure end the runway causing the airplane to flip over and land inverted. The airplane sustained substantial damage. The pilot received only minor injuries. The airplane was loaded with 120 gallons of fungicide and between 1/2 to 3/4 fuel and no mechanical abnormalities were noted prior to the accident. Weight and balance calculations indicated that the airplane was within maximum gross weight and center of gravity limits for the conditions at takeoff. The pilot stated that he had a slight headwind but after a normal liftoff from the runway, he felt like he encountered either a wind shift or downdraft.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inability to maintain a climb after takeoff due to wind shift or downdraft.

Findings

Aircraft	Altitude - Attain/maintain not possible
Environmental issues	Downdraft - Effect on operation

Factual Information

History of Flight

Takeoff	Other weather encounter
Takeoff	Loss of control in flight (Defining event)

Pilot Information

Certificate:	Commercial	Age:	64, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 18, 2008
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 16, 2007
Flight Time:	6280 hours (Total, all aircraft), 2040 hours (Total, this make and model), 6265 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N4990Q
Model/Series:	A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802724T
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	May 12, 2009 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5113 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Not installed	Engine Model/Series:	IO 520 SERIES
Registered Owner:	BORNEMEIER JOEL E	Rated Power:	300 Horsepower
Operator:	BORNEMEIER JOEL E	Operating Certificate(s) Held:	
Operator Does Business As:	Bornemeier Aerial Spraying, Inc	Operator Designator Code:	RMYG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KPMV, 1204 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	20:30 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	23°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Elwood, NE	Type of Flight Plan Filed:	None
Destination:	Elwood, NE (8NE4)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Bornemeier Airstrip 8NE4	Runway Surface Type:	Grass/turf
Airport Elevation:	1292 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	1800 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	40.579681,-99.860595(est)

Administrative Information

Investigator In Charge (IIC):	Gamble, William
Additional Participating Persons:	Dan Pettereson; Federal Aviation Administration FSDO; Lincoln, NE
Original Publish Date:	October 19, 2009
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=74253

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