



Aviation Investigation Final Report

Location:	East Aurora, New York	Accident Number:	ERA13CA298
Date & Time:	June 20, 2013, 16:20 Local	Registration:	N11679
Aircraft:	Bellanca 7KCAB	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that his tailwheel airplane was near its maximum gross weight and he planned to depart his private airstrip from runway 18, a 1,530-foot long turf runway. The pilot had completed takeoff performance calculations, which revealed a total distance of 1,429 feet to clear a 50-foot obstacle. The pilot's calculations included adjustments for an up-sloping runway, grass taller than 4 inches, soft terrain, and no headwind component. He observed that the wind at the time of departure was from the south to southwest at 5 to 10 knots. The engine developed rated power during run-up and the takeoff roll; however, the airplane lifted off slightly further down the runway than the pilot expected and it seemed to stop accelerating in a flat climb attitude. Due to obstacles at the end of the runway, the pilot reduced power and performed an "aggressive" wheel landing in an attempt to stop on the remaining runway. The airplane subsequently nosed over and came to rest inverted on the grass runway. The pilot reported no preimpact mechanical malfunctions with the airplane. Examination of the airplane revealed substantial damage to the forward fuselage and vertical stabilizer. The recorded wind at an airport located approximately 15 miles from the accident site, about 25 minutes prior to the accident, was from 260 degrees at 8 knots, gusting to 14 knots. The pilot added that after the accident, he noticed that the wind had shifted from south to north.

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 aircraft control during a rejected takeoff on a soft turf runway with a gusty wind, resulting in the airplane nosing over.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Soft surface - Effect on operation
Environmental issues	Gusts - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of lift
Takeoff-rejected takeoff	Nose over/nose down (Defining event)

Pilot Information

Certificate:	Airline transport; Commercial	Age:	44, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	March 19, 2013
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 24, 2013
Flight Time:	13200 hours (Total, all aircraft), 55 hours (Total, this make and model), 6393 hours (Pilot In Command, all aircraft), 220 hours (Last 90 days, all aircraft), 85 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N11679
Model/Series:	7KCAB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	307-72
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 23, 2012 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1272 Hrs as of last inspection	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-320
Registered Owner:	KING WILLIAM A	Rated Power:	150 Horsepower
Operator:	KING WILLIAM A	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BUF,727 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	15:54 Local	Direction from Accident Site:	320°
Lowest Cloud Condition:	Few / 20000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots / 14 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	25°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	East Aurora, NY (5NK9)	Type of Flight Plan Filed:	None
Destination:	East Aurora, NY (5NK9)	Type of Clearance:	None
Departure Time:	16:20 Local	Type of Airspace:	

Airport Information

Airport:	Treichler Farm 5NK9	Runway Surface Type:	Grass/turf
Airport Elevation:	1140 ft msl	Runway Surface Condition:	Soft
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	1530 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.761665,-78.496109

Administrative Information

Investigator In Charge (IIC):	Gretz, Robert
Additional Participating Persons:	Jonathan D Ottney; FAA/FSDO; Rochester, NY
Original Publish Date:	July 23, 2013
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=87259

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