



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Charleston, SC	<b>Accident Number:</b>	ERA10LA199
<b>Date &amp; Time:</b>	04/01/2010, 1200 EDT	<b>Registration:</b>	N3181L
<b>Aircraft:</b>	RATCLIFFE JOHN A KOLB MARK3X	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The accident flight was the airplane's first flight and the pilot's first flight in the airplane make and model. According to witnesses, after starting the engine, the pilot completed a high speed taxi before taking off; the airplane lifted off in "a couple hundred feet." The witnesses stated that at first, the airplane pitched up "steeply" then leveled off about 75 feet above ground level (agl). It then pitched up "steeply" again until it reached about 200 feet agl and then it returned to a "less steep" climb angle. The airplane was next observed to make a right turn onto the crosswind leg of the traffic pattern at 300 to 400 feet agl, and then turned onto the downwind leg of the traffic pattern at 700 to 800 feet agl. The airplane then turned to the right, pitched nose down, and continued rotating to the right until it impacted nose first in a marsh located near the end of the runway. The airplane sustained substantial damage to the wing spar and the fuselage. Postaccident examination of the airplane and engine did not reveal any evidence of a mechanical malfunction or failure that would have precluded normal operation. A review of the pilot's records revealed that he had never logged any flight time in the accident airplane make and model. He had never logged any flight time in a tailwheel-equipped airplane, nor did he possess a tailwheel endorsement to act as pilot-in-command of a tailwheel-equipped airplane.

## Flight Events

Approach-VFR pattern downwind - Aerodynamic stall/spin  
Approach-VFR pattern downwind - Loss of control in flight  
Uncontrolled descent - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed which resulted in an aerodynamic stall and subsequent loss of control. Contributing to the accident was the pilot's lack of experience in the make and model airplane.

## Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C  
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C  
Personnel issues-Experience/knowledge-Experience/qualifications-Recent experience w/ equipment-Pilot - F

## Pilot Information

Certificate:	Private	Age:	
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	138 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Manufacturer:	RATCLIFFE JOHN A	Registration:	N3181L
Model/Series:	KOLB MARK3X	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	Rotax
Air Carrier Operating Certificate:	None	Engine Model/Series:	912 ULS
Flight Conducted Under:	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	JZI, 17 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	4 knots, 10°
Temperature:	26°C / 5°C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Charleston, SC (JZI)	Destination:	Charleston, SC (JZI)

## Airport Information

Airport:	Charleston Executive Airport (JZI)	Runway Surface Type:	Concrete
Runway Used:	04	Runway Surface Condition:	
Runway Length/Width:	4313 ft / 150 ft		

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

## Administrative Information

Investigator In Charge (IIC):	Todd G Gunther	Adopted Date:	11/17/2011
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75619">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75619</a>		

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