



# Aviation Investigation Final Report

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<b>Location:</b>	Dunkirk, New York	<b>Accident Number:</b>	ERA15LA269
<b>Date &amp; Time:</b>	July 16, 2015, 11:15 Local	<b>Registration:</b>	N6047W
<b>Aircraft:</b>	CESSNA AIRCRAFT CO 162	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Miscellaneous/other	<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The pilot of the light sport airplane had completed two touch-and-go takeoffs and landings in the airport traffic pattern. During the third takeoff, the right door opened at an altitude about 400 ft above ground level. Seated in the left seat, the pilot attempted to reach across the cockpit and close the door, but could not reach the handle. He stated that the airplane "did not want to fly," and "began to sink" before it impacted trees. A witness stated that the airplane was in an "aggressive" nose-up attitude just before impact.

Postaccident examination of the airplane, including the right door latch, revealed no anomalies that would have precluded normal operation. The pilot's operating handbook for the airplane stated that, in the event of a door opening in flight, the pilot should not attempt to close the door and should land normally as soon as practical. It is likely that the pilot became distracted by the open door during flight, and, in his attempt to close the door at low altitude, the airplane became too slow, exceeded its critical angle of attack, and experienced an aerodynamic stall.

## 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 control of the airplane while attempting to close an open cabin door, which resulted in the airplane exceeding its critical angle of attack and experiencing an aerodynamic stall.

## Findings

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<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Attention - Pilot

## Factual Information

### History of Flight

Initial climb	Miscellaneous/other (Defining event)
Initial climb	Aerodynamic stall/spin

On July 16, 2015, about 1115 eastern daylight time, a Cessna 162, N6047W, was substantially damaged when it impacted trees and terrain after takeoff from Chautauqua County/Dunkirk Airport (DKK), Dunkirk, New York. The private pilot received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight. The airplane was registered to and operated by a private individual under the provisions of Title 14 Code of Federal Regulations Part 91.

A witness located at the airport observed the airplane during its initial climb after takeoff. He stated that, at an altitude about 100-200 feet, the airplane made an "abrupt" left turn, lost altitude, then pitched to a nose-up attitude. He then observed the airplane lose altitude and pitch up a second time, and stated that the airplane was in an "aggressive" nose-up pitch attitude as it sank below the tree line and out of his view.

The pilot reported to a Federal Aviation Administration (FAA) inspector that he conducted a preflight inspection of the airplane and observed no anomalies. He then conducted two touch-and-go takeoffs and landings in the airport traffic pattern before the accident takeoff. On the third takeoff, during climbout from runway 6, the airplane's right cabin door opened at an altitude about 400 feet. The pilot attempted to reach across the right seat and close the door, but could not reach the handle. He stated that the airplane "did not want to fly" and "began to sink." The airplane subsequently impacted trees and the pilot egressed.

The airplane came to rest upright, in a nose-down attitude among trees about one mile northeast of runway 6 at DKK. Postaccident examination of the airplane by an FAA inspector revealed substantial damage to both left and right wings and the fuselage. The fuel tank sight glasses indicated that each fuel tank was about one-quarter full. Control continuity was established from the cockpit to all flight control surfaces. Impact damage precluded a functional test of the right door latches; however, visual inspection revealed no anomalies.

The pilot held a private pilot certificate with a rating for airplane single engine land. He reported 420 total hours of flight experience, of which 90 hours were in the accident airplane make and model.

The airplane was manufactured in 2011 and was equipped with a Continental Motors Inc., O-200 series, 100 hp reciprocating engine. Its most recent condition inspection was completed December 14, 2014. At the time of the accident, the airplane had accrued 90 total hours of operation.

According to the pilot's operating handbook for the airplane, a pilot should not attempt to close an open cabin door inflight. The written procedure stated that the pilot should leave the door open, reduce

throttle as necessary for an airspeed below 80 knots, secure seatbelts and loose items in the cockpit, and land as soon as practical. Landings with an open door were to be performed normally.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	66, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Sport pilot	<b>Last FAA Medical Exam:</b>	December 1, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	August 21, 2014
<b>Flight Time:</b>	(Estimated) 420 hours (Total, all aircraft), 90 hours (Total, this make and model), 300 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA AIRCRAFT CO	<b>Registration:</b>	N6047W
<b>Model/Series:</b>	162	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2011	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Special light-sport (Special)	<b>Serial Number:</b>	16200180
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	December 22, 2014 Condition	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>	69 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	115 Hrs at time of accident	<b>Engine Manufacturer:</b>	CONT MOTOR
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-200
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</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>	KDKK,693 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	203°
<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>	8 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	60°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.12 inches Hg	<b>Temperature/Dew Point:</b>	21°C / 11°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Dunkirk, NY (DKK )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Dunkirk, NY (DKK )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	10:45 Local	<b>Type of Airspace:</b>	Class E;Class G

## Airport Information

<b>Airport:</b>	Chautauqua County/Dunkirk DKK	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	692 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	06	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6000 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## 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>	42.515834,-79.259162(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Diaz, Allison
<b>Additional Participating Persons:</b>	Garry Mitcham; FAA/FSDO; Rochester, NY
<b>Original Publish Date:</b>	March 23, 2017
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=91571">https://data.ntsb.gov/Docket?ProjectID=91571</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](#).