



Aviation Investigation Final Report

Location:	Warrenton, Virginia	Accident Number:	ERA12CA213
Date & Time:	February 13, 2012, 15:50 Local	Registration:	N200ZA
Aircraft:	ZENAIR LTD CH 2000	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor and student pilot, who was the owner of the airplane, were practicing simulated engine out/aborted takeoff procedures. The student pilot completed one aborted takeoff without incident; however, during a second attempt, he overrotated and the airplane climbed to an altitude of about 20 feet. The student pilot applied full engine power and landed on the runway; however, he did not reduce the engine power to idle when instructed. The instructor attempted to take control of the airplane, but the student pilot reported that he did not relinquish the flight controls to the instructor in a timely manner. With full power, the airplane tended to turn left, and the instructor applied right rudder and brakes, but was unable to overcome the full power setting, which the student still had not reduced as instructed. The airplane departed the left side of the runway and struck a runway sign, which resulted in substantial damage to the right wing. The pilots reported no preimpact mechanical malfunctions with the airplane that would have precluded normal operation.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's failure to follow instruction and to relinquish control of the airplane to the flight instructor in a timely manner, which resulted in a runway excursion.

Findings

Personnel issues	Aircraft control - Instructor/check pilot
Personnel issues	Lack of action - Student/instructed pilot
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Takeoff-rejected takeoff	Loss of control on ground (Defining event)
Takeoff-rejected takeoff	Runway excursion
Takeoff-rejected takeoff	Collision with terr/obj (non-CFIT)

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	30,Female
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	October 6, 2010
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 9, 2011
Flight Time:	1500 hours (Total, all aircraft), 70 hours (Total, this make and model), 1200 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Student	Age:	54,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 19, 2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	102 hours (Total, all aircraft), 99 hours (Total, this make and model), 21 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ZENAIR LTD	Registration:	N200ZA
Model/Series:	CH 2000	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-0003
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	November 11, 2011 Annual	Certified Max Gross Wt.:	1692 lbs
Time Since Last Inspection:	21 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1380 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-235 SERIES
Registered Owner:	On file	Rated Power:	115 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HEF,192 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	15:45 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.1 inches Hg	Temperature/Dew Point:	8°C / -11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Manassas, VA (HEF)	Type of Flight Plan Filed:	None
Destination:	Warrenton, VA (HWY)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	

Airport Information

Airport:	Warrenton-Fauquier HWY	Runway Surface Type:	Asphalt
Airport Elevation:	336 ft msl	Runway Surface Condition:	Dry
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	38.586112,-77.710556(est)

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	Robert Corriveau; FAA/FSDO; Washington, DC
Original Publish Date:	October 9, 2012
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=83053

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](#).