



Aviation Investigation Final Report

Location:	Ghent, New York	Accident Number:	ERA12CA313
Date & Time:	April 30, 2012, 17:31 Local	Registration:	N782MD
Aircraft:	ARION AIRCRAFT LLC LIGHTNING LS-1	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, the airplane encountered a bump in the grass runway during the takeoff roll and lifted off the runway several knots slower than rotation speed. After liftoff, the airplane descended to the left side of the runway, impacted trees, and came to rest in a swampy area, resulting in substantial damage to the wings. The pilot reported no preimpact mechanical malfunctions or failures with the airplane that would have precluded normal operation. Postaccident examination of the runway found it to be in satisfactory condition, with no evidence of bumps.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of directional control during takeoff, which resulted in a runway excursion.

Findings

Aircraft	Directional control - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Takeoff	Loss of control in flight (Defining event)
Takeoff	Runway excursion
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline transport	Age:	70, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	May 13, 2009
Occupational Pilot:	No	Last Flight Review or Equivalent:	April 29, 2011
Flight Time:	33000 hours (Total, all aircraft), 107 hours (Total, this make and model), 27000 hours (Pilot In Command, all aircraft), 7 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	ARION AIRCRAFT LLC	Registration:	N782MD
Model/Series:	LIGHTNING LS-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	122
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 30, 2012 Condition	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	99 Hrs as of last inspection	Engine Manufacturer:	JABIRU
ELT:	Installed, not activated	Engine Model/Series:	3300
Registered Owner:	Mark Daniels	Rated Power:	120 Horsepower
Operator:	Mark Daniels	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PSF	Distance from Accident Site:	16 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	11°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ghent, NY (NY1)	Type of Flight Plan Filed:	None
Destination:	Sussex, NJ (FWN)	Type of Clearance:	None
Departure Time:	17:30 Local	Type of Airspace:	

Airport Information

Airport:	Kline Kill Airport NY1	Runway Surface Type:	Grass/turf
Airport Elevation:	380 ft msl	Runway Surface Condition:	Dry;Rough
Runway Used:	01	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 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:	42.350276,-73.636947(est)

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Peter J Lacagnina; FAA/FSDO; Albany, NY
Original Publish Date:	October 15, 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=83521

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](#).