



Aviation Investigation Final Report

Location:	Newburyport, Massachusetts	Accident Number:	ERA18LA175
Date & Time:	June 20, 2018, 12:45 Local	Registration:	N239AM
Aircraft:	AIRCRAFT MFG & DEVELOPMENT CO CH 2000	Aircraft Damage:	Substantial
Defining Event:	Collision during takeoff/land	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that, after a personal, cross-country flight, he entered the traffic pattern at the destination airport and noted a 20° left crosswind between 9 and 11 knots. The final approach was stable, but after crossing the threshold, the airplane descended and drifted left over grass adjacent to the runway. Because the airplane was not over the runway, the pilot chose to conduct a go-around and added full power, but the left main landing gear struck the grass next to the runway. The airplane did not climb and continued drifting left. The pilot retracted the flaps in an attempt to gain altitude; however, the airplane still did not climb, and the stall warning horn activated. He pushed the yoke forward to avoid a stall, and the airplane touched down on the grass and then impacted trees, which resulted in substantial damage to the wings and fuselage.

The pilot reported that there were no mechanical malfunctions or failures with the airplane that contributed to the accident. A stand of trees was located left of the runway. It is possible that the trees blocked the crosswind when the airplane descended below treetop level and that the pilot did not adequately compensate for the existing winds during the final approach and landing flare.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to adequately compensate for existing crosswind conditions during the final approach and landing flare, which led to the airplane drifting left of the runway, and his delayed decision to go around, which resulted in the airplane touching down in the grass next to the runway and a subsequent collision with trees.

Findings

Environmental issues	Crosswind - Response/compensation
Personnel issues	Aircraft control - Pilot
Personnel issues	Delayed action - Pilot
Environmental issues	Tree(s) - Effect on operation

Factual Information

History of Flight

Approach	Other weather encounter
Approach	Loss of control in flight
Approach-VFR go-around	Attempted remediation/recovery
Landing	Collision during takeoff/land (Defining event)
Landing	Runway excursion

On June 20, 2018, about 1245 eastern daylight time, Aircraft Manufacturing and Development Company CH2000, N239AM, was substantially damaged during a go-around at Plum Island Airport (2B2), Newburyport, Massachusetts. The private pilot sustained minor injuries. The airplane was operated by Bald Eagle Flying Club under the provisions of 14 Code of Federal Regulations part 91 as a personal flight. Visual meteorological conditions prevailed, and no flight plan was filed for flight that originated at Portland International Airport (PWM), Portland, Maine at 1142 and was destined for 2B2.

The pilot reported that he entered at the traffic pattern at 2B2 following an uneventful flight from PWM. The windsock showed a 20° left crosswind between 9 and 11 kts for runway 28. The approach to runway 28 was stable at 65 kts and the airplane was configured properly over the threshold. After crossing the threshold, the airplane descended and drifted to the left. The airplane was no longer over the runway, so the pilot elected to go around. He added full power and the left main gear struck the grass next to the runway. The airplane was not gaining altitude and continued to the left. He retracted the flaps with the hope of gaining altitude; however, the airplane did not climb and the stall warning horn activated. He pushed the yoke forward to avoid a stall and the airplane touched down on the grass and then collided with trees.

An inspector with the Federal Aviation Administration responded to the accident site and examined the wreckage. He reported that the airplane came to rest in an area of thick brush and trees. There was no fire. The wings and fuselage sustained structural damage. The nose when was separated and found about 8 ft west of the main wreckage. The propeller and spinner were separated from the engine.

An examination of the runway revealed no skid or tire marks that would indicate touchdown on the paved surface. The first indication of touchdown was found in the grass, about ½ way down the 2,105 ft runway and 200 feet left of the runway edge. Several propeller slash marks were found in the ground, 20 ft west of the initial touchdown point. A stand of trees was located south and west of runway 28.

The pilot reported 149 hours of total flight time, including 22 hours in the accident airplane make and model. He reported that there were no mechanical malfunctions or failures with the airplane prior to the accident.

Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	March 22, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 2, 2017
Flight Time:	149 hours (Total, all aircraft), 22 hours (Total, this make and model), 55 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	AIRCRAFT MFG & DEVELOPMENT CO	Registration:	N239AM
Model/Series:	CH 2000 UNDESIGNAT	Aircraft Category:	Airplane
Year of Manufacture:	2004	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	20-1039
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 5, 2018 Annual	Certified Max Gross Wt.:	1692 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	O-235
Registered Owner:	BALD EAGLE FLYING CLUB	Rated Power:	117 Horsepower
Operator:	BALD EAGLE FLYING CLUB	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BVY,107 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	12:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	25°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Portland, ME (PWM)	Type of Flight Plan Filed:	None
Destination:	Newburyport, MA (2B2)	Type of Clearance:	VFR flight following
Departure Time:	11:42 Local	Type of Airspace:	Class E

Airport Information

Airport:	Plum Island 2B2	Runway Surface Type:	Asphalt
Airport Elevation:	11 ft msl	Runway Surface Condition:	Dry;Rough
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	2105 ft / 50 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	42.79639,-70.839447(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Justin Gierka; FAA/FSDO; Burlington, MA
Original Publish Date:	April 30, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97556

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