



Aviation Investigation Final Report

Location:	Great Falls, Montana	Accident Number:	GAA18CA481
Date & Time:	August 11, 2018, 13:00 Local	Registration:	N77TR
Aircraft:	Helio H 295	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the tailwheel-equipped airplane reported that, during takeoff, the right wing lifted "unexpectedly." He attempted to recover, but the left main landing gear sideloaded and collapsed. The left wing impacted the runway, and the airplane rotated to the left 180° and came to rest on the runway.

The airplane sustained substantial damage to the left wing.

The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

The automated weather observation station located on the airport reported that, about 7 minutes before the accident, the wind was from 320° at 14 knots. The airplane was departing from runway 21.

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 lateral control of the airplane during takeoff in a quartering tailwind.

Findings

Aircraft	Lateral/bank control - Not attained/maintained
Personnel issues	Aircraft control - Pilot
Environmental issues	Tailwind - Effect on operation

Factual Information

History of Flight

Takeoff	Loss of control on ground (Defining event)
Takeoff	Attempted remediation/recovery
Takeoff	Landing gear collapse
Takeoff	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	42,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 3 Without waivers/limitations	Last FAA Medical Exam:	November 11, 2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 6, 2018
Flight Time:	(Estimated) 801 hours (Total, all aircraft), 232 hours (Total, this make and model), 26 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Helio	Registration:	N77TR
Model/Series:	H 295 No Series	Aircraft Category:	Airplane
Year of Manufacture:	1965	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2514
Landing Gear Type:	Tailwheel	Seats:	6
Date/Type of Last Inspection:	May 9, 2018 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	2830 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	GO-480-G1D6
Registered Owner:		Rated Power:	295 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:	KGTF,3657 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	230°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	37°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Great Falls, MT (GTF)	Type of Flight Plan Filed:	None
Destination:	Chewelah, WA (1S9)	Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class D;TRSA

Airport Information

Airport:	GREAT FALLS INTL GTF	Runway Surface Type:	Asphalt
Airport Elevation:	3680 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	10502 ft / 150 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:	47.485279,-111.36(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Bill M Thomas; FAA; Helena, MT
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98045

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).