



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Wauchula, Florida	Accident Number:	ERA23LA114
Date & Time:	January 20, 2023, 15:15 Local	Registration:	N40DG
Aircraft:	DEGRAW RICHARD R SUMMIT 23	Aircraft Damage:	Substantial
Defining Event:	Hard landing	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was attempting to make a crosswind landing and flared too high. He tried to recover by adding power, but it was too late, and the gyroplane landed hard on the left main landing gear. The gyroplane then bounced back and forth on both main landing gear before it rolled over and substantially damaged the main rotor blades and tail section. The pilot reported that there were no preimpact mechanical malfunctions or failures of the gyroplane 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 pilot's improper landing flare, which resulted in a hard landing and dynamic rollover.

Findings

Aircraft	Landing flare - Not attained/maintained
Personnel issues	Aircraft control - Pilot

Factual Information

History of Flight

Landing-flare/touchdown	Hard landing (Defining event)
Landing-flare/touchdown	Dynamic rollover

Pilot Information

Certificate:	Private	Age:	81,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	Gyroplane; Helicopter	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	June 22, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 15, 2021
Flight Time:	2260 hours (Total, all aircraft), 50 hours (Total, this make and model), 2107.4 hours (Pilot In Command, all aircraft), 0.6 hours (Last 90 days, all aircraft), 0.6 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEGRAW RICHARD R	Registration:	N40DG
Model/Series:	SUMMIT 23	Aircraft Category:	Airplane
Year of Manufacture:	1992	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	9203
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	November 11, 2022 Annual	Certified Max Gross Wt.:	700 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	350.7 Hrs as of last inspection	Engine Manufacturer:	Rotax
ELT:	Not installed	Engine Model/Series:	912UL
Registered Owner:	On file	Rated Power:	80 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:	KBOW, 125 ft msl	Distance from Accident Site:	26 Nautical Miles
Observation Time:	15:45 Local	Direction from Accident Site:	11°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.09 inches Hg	Temperature/Dew Point:	27°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Wauchula, FL	Type of Flight Plan Filed:	None
Destination:	Wauchula, FL	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

Airport Information

Airport:	WAUCHULA MUNI CHN	Runway Surface Type:	Asphalt
Airport Elevation:	107 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	4005 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	27.514917,-81.880472(est)

Administrative Information

Investigator In Charge (IIC):	Read, Leah
Additional Participating Persons:	Eric Muro; FAA/FSDO; Tampa, FL
Original Publish Date:	June 15, 2023
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=106615

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](#).