Aviation Investigation Final Report

Location:	Ray, Michigan	**Accident Number:**	CEN21LA295
Date & Time:	June 28, 2021, 19:30 Local	**Registration:**	N920SS
Aircraft:	FLIGHT DESIGN GMBH CTLS	**Aircraft Damage:**	Minor
Defining Event:	AC/prop/rotor contact w person	**Injuries:**	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor was conducting the 16-year-old student pilot's first instructional flight. After completing several takeoffs and landings, they "taxied around the airport multiple times," during which they experienced "light to sometimes moderate" rain. At the conclusion of the lesson, the rain became heavy enough that visibility was reduced, and the instructor decided to taxi the airplane into its open hangar to avoid getting wet. As they approached the hangar, the instructor noted a set of wheel chocks on the ground, and with the engine still running, he instructed the student to exit the airplane, walk around the propeller arc, and move the chocks so that he, "could taxi the airplane nose-first into the hangar...then turn it around once inside and shut down." He stated that he repeated the instructions to ensure that the student understood. The student subsequently exited the airplane and walked forward into the spinning propeller, resulting in serious injury. The instructor reported that there were no preaccident mechanical malfunctions or failures of 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 flight instructor's improper decision to direct the student pilot to exit the airplane with the engine running, which resulted in serious injury when the student walked into the propeller arc.

Findings

Personnel issues	Decision making/judgment - Instructor/check pilot

Factual Information

History of Flight

Other	AC/prop/rotor contact w person (Defining event)

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	37
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	
Medical Certification:	Class 2 Unknown	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 14, 2021
Flight Time:	(Estimated) 571 hours (Total, all aircraft), 4.2 hours (Total, this make and model), 46.6 hours (Pilot In Command, all aircraft), 1080.9 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	FLIGHT DESIGN GMBH	**Registration:**	N920SS
Model/Series:	CTLS	**Aircraft Category:**	Airplane
Year of Manufacture:	2010	**Amateur Built:**	
Airworthiness Certificate:	Special light-sport (Special)	**Serial Number:**	F-10-02-05
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	March 2, 2021 Condition	**Certified Max Gross Wt.:**	1320 lbs
Time Since Last Inspection:	45.5 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2315 Hrs as of last inspection	**Engine Manufacturer:**	Rotax
ELT:	C126 installed, not activated	**Engine Model/Series:**	912ULS
Registered Owner:	DODGER AIRCRAFT LLC	**Rated Power:**	100 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:	KMTC,580 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	18:56 Local	**Direction from Accident Site:**	158°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 5000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.11 inches Hg	**Temperature/Dew Point:**	26°C / 26°C
Precipitation and Obscuration:	Light - Showers - Rain		
Departure Point:	Ray, MI	**Type of Flight Plan Filed:**	
Destination:	Ray, MI	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	RAY COMMUNITY 57D	**Runway Surface Type:**	
Airport Elevation:	632 ft msl	**Runway Surface Condition:**	Dry
Runway Used:		**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 None	**Aircraft Damage:**	Minor
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	1 Serious, 1 None	**Latitude, Longitude:**	42.738367,-82.889726(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	David Schrader; FAA FSDO; Belleville, MI
Original Publish Date:	February 18, 2022
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=103380