



# **Aviation Investigation Final Report**

Location: Sanford, Florida Accident Number: GAA18CA445

Date & Time: July 25, 2018, 17:10 Local Registration: N482DA

Aircraft: Cirrus SR20 Aircraft Damage: Substantial

**Defining Event:** Ground collision **Injuries:** 3 None

Flight Conducted Under: Part 91: General aviation - Instructional

#### **Analysis**

The flight instructor reported that, following simulated instrument flight instruction to a private pilot-rated student, he took the controls while on approach to the airport. He added that it had started to rain but that the runway was still visible. Before touchdown, the instructor kept the airplane in ground effect to reduce the airspeed, and the airplane touched down about halfway down the 3,578-ft-long runway, bounced twice, and touched down again. He then applied brakes, and the student "got the flaps up." After exiting the runway onto a taxiway, the instructor applied brakes, but the "airplane was still traveling too fast when [it] entered the ramp," and it veered slightly left of the taxiway centerline and struck three unoccupied airplanes on the ramp.

The airplane sustained substantial damage to the left wing and left-wing spar box.

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

The airport's automated weather observation station reported that, about the time of the accident, the wind was from 200° at 16 knots, gusting to 23 knots; visibility was 1 statute mile; broken clouds at 3,900 ft; temperature 81°F; dew point 73°F; and heavy rain. The instructor landed the airplane on runway 27C.

#### **Probable Cause and Findings**

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

The flight instructor's failure to maintain an appropriate approach speed in crosswind conditions, which resulted in the airplane landing long on the wet runway and his subsequent loss of directional control when he attempted to exit the runway at high speed onto a taxiway, which resulted in the airplane subsequently colliding with three airplanes on the ramp.

#### **Findings**

Aircraft	Airspeed - Not attained/maintained	
Aircraft	Directional control - Not attained/maintained	
Personnel issues	Aircraft control - Instructor/check pilot	
Environmental issues	Thunderstorm - Effect on operation	
Environmental issues	Crosswind - Effect on operation	
Environmental issues	Gusts - Effect on operation	
Environmental issues	Wet surface - Effect on operation	

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# **Factual Information**

# **History of Flight**

Landing	Abnormal runway contact
Taxi	Ground collision (Defining event)

### Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	June 1, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 25, 2017
Flight Time:	(Estimated) 556.2 hours (Total, all aircraft), 138.5 hours (Total, this make and model), 356 hours (Pilot In Command, all aircraft), 138.5 hours (Last 90 days, all aircraft), 75.3 hours (Last 30 days, all aircraft)		

### **Student pilot Information**

Certificate:	Private	Age:	21,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 With waivers/limitations	Last FAA Medical Exam:	October 16, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 27, 2018
Flight Time:	(Estimated) 86 hours (Total, all aircraft), 11 hours (Total, this make and model)		

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### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cirrus	Registration:	N482DA
Model/Series:	SR20 No Series	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1824
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 14, 2018 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	9606.8 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-360-ES
Registered Owner:		Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None

### **Meteorological Information and Flight Plan**

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Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSFB,55 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	21:07 Local	Direction from Accident Site:	291°
<b>Lowest Cloud Condition:</b>		Visibility	
Lowest Ceiling:	Broken / 3900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	16 knots / 23 knots	Turbulence Type Forecast/Actual:	None / Convective
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / Light
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	27°C / 23°C
Precipitation and Obscuration:	Heavy - None - Rain		
Departure Point:	Sanford, FL (SFB)	Type of Flight Plan Filed:	VFR
Destination:	Sanford, FL (SFB)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class C

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#### **Airport Information**

Airport:	ORLANDO SANFORD INTL SFB	Runway Surface Type:	Asphalt
Airport Elevation:	54 ft msl	Runway Surface Condition:	Wet
Runway Used:	27C	IFR Approach:	None
Runway Length/Width:	3578 ft / 75 ft	VFR Approach/Landing:	Full stop

#### **Wreckage and Impact Information**

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	28.776945,-81.235(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Rudolph Nudo; FAA; Orlando, FL
Original Publish Date:	September 26, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97902

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.

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