



Aviation Investigation Final Report

Location: Marana, Arizona Accident Number: GAA19CA038

Date & Time: October 27, 2018, 14:40 Local Registration: N537MA

Aircraft: Diamond DA 40 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The solo student pilot reported that, while en route to the nontowered airport, she obtained local weather and reported on the common traffic advisory frequency that she would be entering the downwind for runway 30. Another pilot in the traffic pattern reported that they were using runway 12, so the student turned the airplane 180° to enter the downwind for runway 12. She added that, during the landing roll, she applied brakes and attempted to turn right off the runway, but the "speed was still high." She realized that she would not be able to make the turn, so she attempted to turn left back onto the runway. Subsequently, the airplane skidded off the runway to the right and impacted a taxiway sign.

The airplane sustained substantial damage to the right wing.

The deputy safety officer of the flight school 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 5 minutes before the accident, the wind was from 350° at 4 knots. The student landed the airplane on runway 12.

Probable Cause and Findings

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

The student pilot's excessive taxi speed during a turn from the runway to a taxiway, which resulted in a runway excursion and collision with a taxiway sign.

Findings

Aircraft Surface speed/braking - Not attained/maintained

Personnel issues Aircraft control - Student/instructed pilot

Environmental issues Sign/marker - Contributed to outcome

Environmental issues Tailwind - Effect on operation

Environmental issues Sign/marker - Contributed to outcome

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Factual Information

History of Flight

Landing-landing roll	Miscellaneous/other
Landing-landing roll	Loss of control on ground (Defining event)
Landing-landing roll	Runway excursion

Student pilot Information

Certificate:	Student	Age:	23,Female
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
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:	June 7, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 87 hours (Total, all aircraft), 87 hours (Total, this make and model), 8 hours (Pilot In Command, all aircraft), 47 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Diamond	Registration:	N537MA
Model/Series:	DA 40 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2005	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	40.463
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 9, 2018 AAIP	Certified Max Gross Wt.:	2535 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5905.9 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	IO-360-M1A
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	Pilot school (141)
Operator Does Business As:	CAE Oxford Aviation Academy	Operator Designator Code:	B4VS

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KMZJ,1892 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	21:35 Local	Direction from Accident Site:	317°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	350°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mesa, AZ (FFZ)	Type of Flight Plan Filed:	VFR
Destination:	Marana, AZ (AVQ)	Type of Clearance:	VFR flight following
Departure Time:	13:36 Local	Type of Airspace:	Class G

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Airport Information

Airport:	MARANA RGNL AVQ	Runway Surface Type:	Asphalt
Airport Elevation:	2031 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	6901 ft / 100 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.412776,-111.220832(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Steven Meisner; FAA; Scottsdale, AZ
Original Publish Date:	June 5, 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=98557

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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