



Aviation Investigation Final Report

Location:	Palatka, Florida	Accident Number:	GAA19CA466
Date & Time:	July 10, 2019, 12:00 Local	Registration:	N805PA
Aircraft:	Diamond DA 42 NG	Aircraft Damage:	Substantial
Defining Event:	Landing gear not configured	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor in the retractable, landing gear-equipped airplane reported that the pilot receiving instruction was on the controls and that he told the instructor that he was feeling some motion sickness due to light turbulence in the pattern; the pilot corroborated the instructor's statement and stated that he was also fatigued. The instructor reported that, during their discussion, they became distracted and did not configure the airplane for landing; the pilot reported that they did not complete the landing checklist. Subsequently, the airplane landed with the landing gear retracted.

The airplane sustained substantial damage to both engine gear boxes.

The instructor reported that there were no preaccident mechanical failures or malfunctions with 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 pilot receiving instruction's failure to extend the landing gear and the flight instructor's failure to verify that the landing gear was extended due to distraction, which resulted in a gear-up landing.

Findings

Aircraft	Gear extension and retract sys - Not used/operated
Personnel issues	Task monitoring/vigilance - Student/instructed pilot
Personnel issues	Delayed action - Instructor/check pilot
Personnel issues	Use of equip/system - Student/instructed pilot
Personnel issues	Attention - Student/instructed pilot
Personnel issues	Attention - Instructor/check pilot
Personnel issues	Use of checklist - Student/instructed pilot

Factual Information

History of Flight

Landing	Miscellaneous/other
Landing	Landing gear not configured (Defining event)

Pilot Information

Certificate:	Commercial	Age:	21, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	None
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	May 3, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	March 30, 2019
Flight Time:	(Estimated) 233 hours (Total, all aircraft), 18 hours (Total, this make and model), 148 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	28, Male
Airplane Rating(s):	Single-engine sea; Multi-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	None
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 30, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 16, 2018
Flight Time:	(Estimated) 2700 hours (Total, all aircraft), 1119 hours (Total, this make and model), 2595 hours (Pilot In Command, all aircraft), 283 hours (Last 90 days, all aircraft), 49 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Diamond	Registration:	N805PA
Model/Series:	DA 42 NG Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2008	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	42.321
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 30, 2019 Annual	Certified Max Gross Wt.:	4189 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	6285.2 Hrs at time of accident	Engine Manufacturer:	Astro
ELT:	C91 installed, not activated	Engine Model/Series:	E4-B
Registered Owner:	Bravo Leasing Llc	Rated Power:	167 Horsepower
Operator:	Phoenix East Aviation	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	K28J,47 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:15 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Few / 2800 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 14 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Daytona Beach, FL (DAB)	Type of Flight Plan Filed:	None
Destination:	Palatka, FL (28J)	Type of Clearance:	VFR
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Palatka Muni - Lt Kay Larkin F 28J	Runway Surface Type:	Asphalt
Airport Elevation:	47 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	3510 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	29.658332,-81.689445(est)

Administrative Information

Investigator In Charge (IIC):	Gutierrez, Eric
Additional Participating Persons:	Bill Leech; FAA; Orlando, FL
Original Publish Date:	December 2, 2019
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=99966

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