



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Fort Lauderdale, Florida	Accident Number:	GAA18CA406
Date & Time:	July 9, 2018, 15:20 Local	Registration:	N66340
Aircraft:	Beech 76	Aircraft Damage:	Substantial
Defining Event:	Landing area undershoot	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor reported that he asked the pilot receiving instruction to simulate a power-off emergency landing with a 180° turn to the runway and directed her to "lower the gear when landing was assured." After initiating the power-off approach, the pilot receiving instruction turned the airplane from the downwind leg onto the base leg of the traffic pattern and extended the landing gear. The sink rate increased, and she attempted to correct with full engine power, but the airplane continued to descend. The airplane landed short of the runway and struck a ground lighting system. The pilot receiving instruction then initiated a go-around and landed without further incident.

The airplane sustained substantial damage to the right wing.

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 080° at 8 knots. The airplane landed on runway 09.

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 maintain a proper approach path and her delayed go-around during a simulated emergency landing, which resulted in landing short of the runway. Contributing to the accident was the flight instructor's failure to properly monitor the student's approach.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Aircraft control - Student/instructed pilot
Personnel issues	Delayed action - Student/instructed pilot
Personnel issues	Monitoring other person - Instructor/check pilot
Environmental issues	Runway/taxi/approach light - Contributed to outcome

Factual Information

History of Flight

Landing-flare/touchdown	Landing area undershoot (Defining event)
Landing-flare/touchdown	Attempted remediation/recovery
Landing-flare/touchdown	Miscellaneous/other
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	65,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:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 26, 2015
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 16000 hours (Total, all aircraft), 14000 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Private	Age:	38,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	March 7, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N66340
Model/Series:	76 No Series	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	ME-241
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 1, 2017 Annual	Certified Max Gross Wt.:	3900 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O&VO-360 SER
Registered Owner:		Rated Power:	
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFXE, 14 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:16 Local	Direction from Accident Site:	214°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	80°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	34°C / 22°C
Precipitation and Obscuration:	Moderate - Thunderstorm -		
Departure Point:	Fort Lauderdale, FL (FXE)	Type of Flight Plan Filed:	None
Destination:	Fort Lauderdale, FL (FXE)	Type of Clearance:	None
Departure Time:	15:10 Local	Type of Airspace:	Class D

Airport Information

Airport:	Fort Lauderdale Executive FXE	Runway Surface Type:	Asphalt
Airport Elevation:	13 ft msl	Runway Surface Condition:	Unknown
Runway Used:	09	IFR Approach:	Unknown
Runway Length/Width:	6002 ft / 100 ft	VFR Approach/Landing:	Simulated forced landing

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:	26.197221,-80.170829(est)

Administrative Information

Investigator In Charge (IIC):	Nepomuceno, Eleazar
Additional Participating Persons:	Daniel Sullivan; FAA; Miramar, FL
Original Publish Date:	June 10, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97722

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.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).