National Transportation Safety Board
Aviation Accident Data Summary

Location:	St. Petersburg, FL	**Accident Number:**	ERA15FA378
Date & Time:	09/30/2015, 1147 EDT	**Registration:**	N21ND
Aircraft:	PIPER PA 30	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The commercial pilot, who had no documented previous experience in the make and model multiengine airplane, was performing touch-and-go landings on a 9,730-ft-long runway to familiarize himself with the airplane. Witnesses reported that, during the second takeoff, the airplane appeared to "struggle." Another witness reported the airplane was climbing at an unusually shallow angle. The airplane then drifted to the right of the runway centerline, rolled sharply to the right, and descended to ground impact in a steep, nose-low attitude. The airplane came to rest about 180 ft right of the runway centerline and about 1,450 ft before the end of the runway's paved surface.

Examination of the wreckage revealed that the right engine throttle was retarded, and the propeller lever was in the feather position. The right propeller blades displayed little damage and appeared to be in the feathered position. The left engine throttle and propeller levers were full forward, and damage to the left propeller was indicative of full left engine power at impact. Examination of the right engine revealed three anomalies; the diaphragm of the right fuel servo exhibited an unusual soot pattern; particulate contamination was in the fuel filter screen; and the spark plugs were in a degraded condition. However, none of these anomalies would likely have resulted in a total loss of engine power.

Based on the witness descriptions and the lack of damage to the right propeller blades, it is likely that during the climb, the right engine experienced, at least, a partial loss of power. Based on the postaccident positions of the right engine throttle and propeller levers and signatures observed on the right engine's propeller, the pilot likely responded to the loss of right engine power by retarding the right throttle and feathering the right propeller; however, he did not maintain the appropriate airspeed and subsequently lost control of the airplane. Given the airplane's impact location about 1,450 ft before the end of the runway, it is likely that, if the pilot had immediately retarded both throttles, maintained the appropriate airspeed, and landed straight ahead, he likely would have maintained control of the airplane. Additionally, the airspeed indicator did not have a marking for single-engine minimum controllable airspeed, nor was there a placard on the instrument panel as required by a Federal Aviation Administration airworthiness directive and the airplane flight manual. While the lack of these markings was not causal to the accident, their presence might have reminded the pilot of this critical information, and might have changed the outcome of the event.

Flight Events

Initial climb - Loss of engine power (total)
Initial climb - Attempted remediation/recovery

Initial climb - Loss of control in flight

Probable Cause

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

The pilot's failure to maintain single-engine minimum controllable airspeed following a loss of right engine power during initial climb. Also causal was the loss of right engine power for reasons that could not be determined because examination of the wreckage revealed no significant mechanical deficiencies. Contributing to the outcome was the failure of maintenance personnel to ensure that required airspeed markings and placards were installed in accordance with an airworthiness directive and the airplane flight manual.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C
Aircraft-Aircraft power plant-Engine (reciprocating)-Recip engine power section-Malfunction - C
Aircraft-Aircraft systems-Indicating/recording systems-Instrument panel-Incorrect service/maintenance - F
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C
Personnel issues-Task performance-Maintenance-Installation-Maintenance personnel - F

Pilot Information

Certificate:	Flight Instructor; Commercial	**Age:**	24
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Instrument Rating(s):**	Airplane
Other Aircraft Rating(s):	None	**Instructor Rating(s):**	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	768.1 hours (Total, all aircraft), 0.4 hours (Total, this make and model), 690.3 hours (Pilot In Command, all aircraft), 221 hours (Last 90 days, all aircraft), 84.9 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	**Registration:**	N21ND
Model/Series:	PA 30 NO SERIES	**Engines:**	2 Reciprocating
Operator:	Sowards Aircraft Leasing, LLC	**Engine Manufacturer:**	LYCOMING
Operating Certificate(s) Held:	None	**Engine Model/Series:**	IO-320 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	PIE, 10 ft msl	**Weather Information Source:**	Weather Observation Facility
Lowest Ceiling:		**Wind Speed/Gusts, Direction:**	10 knots / , 300°
Temperature:	29°C	**Visibility**	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	St. Petersburg, FL (PIE)	**Destination:**	St. Petersburg, FL (PIE)

Airport Information

Airport:	ST PETE-CLEARWATER INTL (PIE)	**Runway Surface Type:**	Asphalt
Runway Used:	36R	**Runway Surface Condition:**	Dry
Runway Length/Width:	9730 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Latitude, Longitude:	27.919722, -82.689167		

Administrative Information

Investigator In Charge (IIC):	Lawrence A Mccarter	**Adopted Date:**	05/03/2017
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=92059		