



National Transportation Safety Board Aviation Accident Data Summary

Location:	Melbourne, FL	Accident Number:	ERA14LA268
Date & Time:	04/04/2014, 1014 EDT	Registration:	N642FT
Aircraft:	PIPER AIRCRAFT INC PA-28-161	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The flight instructor reported that, while taxiing off the runway after landing and when the airplane was just before the hold short lines, the engine quit. The flight instructor contacted the tower air traffic controller and asked for permission to push the airplane completely off the runway, but the tower controller declined and instructed him to advise whether he could get the engine started. The flight instructor attempted to start the engine using procedures for a hot and cold engine and then noticed smoke coming from the engine cowling. The flight instructor secured the airplane, and, after evacuating it, noticed flames coming from the engine cowling, which he was unable to extinguish using the on-board fire extinguisher. Airport rescue and firefighting personnel responded and extinguished the fire.

Postaccident examination of the carburetor revealed that the loosening torque values of the screws that secure the throttle body to the carburetor bowl were lower than the tightening torque value specified for overhaul. However, repair station personnel reported that it was not uncommon for in-service units to exhibit no loosening torque value. The engine fire was likely caused by the flight instructor's overpriming of the engine during multiple unsuccessful engine start attempts, which likely resulted from his feeling rushed to get the engine started while the airplane was still on an active runway. The reason for the loss of engine power could not be determined.

Flight Events

Standing-engine(s) start-up - Fire/smoke (non-impact)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's overpriming of the engine during multiple unsuccessful engine start attempts on an active runway, which resulted in an engine compartment fire.

Findings

Aircraft-Aircraft systems-Fuel system-Fuel distribution-Incorrect use/operation - C
Personnel issues-Action/decision-Action-Incorrect action performance-Instructor/check pilot - C

Flight Instructor Information

Certificate:	Flight Instructor; Commercial	Age:	20
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine; Instrument Airplane
Flight Time:	570 hours (Total, all aircraft), 524 hours (Pilot In Command, all aircraft), 141 hours (Last 90 days, all aircraft), 64 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Student Pilot Information

Certificate:	Private	Age:	29
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	126 hours (Total, all aircraft), 117 hours (Total, this make and model), 66 hours (Pilot In Command, all aircraft), 4 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER AIRCRAFT INC	Registration:	N642FT
Model/Series:	PA-28-161	Engines:	1 Reciprocating
Operator:	FIT AVIATION, LLC	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-320-D3G
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	MLB, 33 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	9 knots, 200°
Temperature:	24° C / 17° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Melbourne, FL (MLB)	Destination:	Melbourne, FL (MLB)

Airport Information

Airport:	Melbourne International Arpt (MLB)	Runway Surface Type:	Asphalt
Runway Used:	27R	Runway Surface Condition:	Unknown
Runway Length/Width:	6000 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC): Timothy W Monville Adopted Date: 12/15/2014
Investigation Docket: <http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=89311>

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