

National Transportation Safety Board
Washington, DC 20594

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Brief of Accident

Adopted 05/06/2010

ERA09FA248 File No. 26664	04/17/2009	Oakland Park, FL	Aircraft Reg No. N1935G	Time (Local): 11:15 EDT
Make/Model: Cessna / 421B	Engine Make/Model: Continental Motors / GTSIO-520-H	Aircraft Damage: Substantial	Crew 1 Pass 0	Fatal 1 Serious 0 Minor/None 0
Number of Engines: 2	Operating Certificate(s): None	Type of Flight Operation: Personal		
Reg. Flight Conducted Under: Part 91: General Aviation				
Last Depart. Point: Fort Lauderdale, FL	Destination: Fernandina, FL	Airport Proximity: Off Airport/Airstrip	Condition of Light: Day Weather Info Src: Weather Observation Facility Basic Weather: Visual Conditions Lowest Ceiling: None Visibility: 10.00 SM Wind Dir/Speed: 060 / 015 Kts Temperature (°C): 24 Precip/Obscuration: No Obscuration; No Precipitation	
Pilot-in-Command	Age: 80		Flight Time (Hours)	
Certificate(s)/Rating(s) Commercial; Private; Multi-engine Land; Single-engine Land; Single-engine Sea; Glider			Total All Aircraft: 23000 Last 90 Days: 25 Total Make/Model: 5000 Total Instrument Time: UnK/Nr	
Instrument Ratings Airplane				

*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***

Prior to the accident flight witnesses observed the pilot "haphazardly" pouring oil into the right engine. The pilot then ran the engines at mid-range power for approximately 20 minutes. The airplane subsequently taxied out of the ramp area and departed. Fire was observed emanating from the right engine after rotation. The airplane continued in a shallow climb from the runway, flying low, with the right engine on fire. The airplane then banked right to return to the airport and descended into a residential area. Examination of the right engine revealed an exhaust leak at the No. 4 cylinder exhaust riser flange. Additionally, one of the flange boltholes was elongated, most likely from the resulting vibration. The fuel nozzle and B-nut were secure in the No. 4 cylinder; however, its respective fuel line was separated about 8 inches from the nozzle. No determination could be made as to when the fuel line separated (preimpact or postimpact) due to the impact and postcrash fire damage. Examination of the right engine turbocharger revealed that the compressor wheel exhibited uniform deposits of an aluminum alloy mixture, consistent with ingestion during operation, and most likely from the melting of the aluminum fresh air duct. Additionally, the right propeller was found near the low pitch position, which was contrary to the owner's manual emergency procedure to secure the engine and feather the propeller in the event of an engine fire.

Updated at May 6 2010 10:45PM

Brief of Accident (Continued)

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Oakland Park, FL

Aircraft Reg No. N1935G

Time (Local): 11:15 EDT

OCCURRENCES

Takeoff - Powerplant sys/comp malf/fail

Takeoff - Fire/smoke (non-impact)

Emergency descent - Loss of control in flight

Uncontrolled descent - Collision with terr/obj (non-CFIT)

FINDINGS

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-(general)-Not attained/maintained - C

Aircraft-Aircraft power plant-Engine controls-(general)-Incorrect use/operation - C

Aircraft-Aircraft power plant-(general)-(general)-Malfunction - F

Findings Legend: (C) = Cause, (F) = Factor

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

The pilot's failure to maintain aircraft control and secure the right engine during an emergency return to the airport after takeoff. Contributing to the accident was an in-flight fire of the right engine for undetermined reasons.