



National Transportation Safety Board Aviation Accident Final Report

Location:	Jupiter, FL	Accident Number:	MIA03LA154
Date & Time:	08/02/2003, 1301 EDT	Registration:	N876RD
Aircraft:	Piper PA-31-310	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot stated that he and his wife were en route to a medical conference which was to be held aboard a cruise ship that was departing from Fort Lauderdale, Florida, at 1700. He stated that both tanks were full of fuel when he departed the Canton Regional Airport, Canton, Ohio, en route to Fort Lauderdale Executive Airport. According to the pilot, the inboard tanks had been selected for the first hour and a half and the outboard tanks for the following two hours. He said the flight was vectored around thunderstorms, and during the descent, when about 12 miles to the north of Palm Beach International Airport, Palm Beach, Florida, the left engine ceased operating. He said that at this time he noticed that both inboard fuel indicators showed the tanks to be empty, and he switched to the outboard tanks, both of which were shown to be a quarter full. The pilot stated that two minutes later both engines began to surge, and after making an emergency radio communications call, he was advised by the FAA Air Traffic Controller that Tailwinds Airport was located 4 miles to the west. Unable to reach the runway at Tailwinds Airport, the pilot said he made a forced landing in an orange grove. The pilot also said that prior to the accident, there had not been any mechanical failure or malfunctions to the airplane or any of its systems. Examination of the accident site revealed that the airplane had incurred substantial damage, and there was little or no fuel present at the scene. Follow-on examination of the airplane, its fuel system and both engines revealed no anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to adequately plan for the flight which resulted in fuel exhaustion, a forced landing, and damage to the airplane during the landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: DESCENT - NORMAL

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. FLUID,FUEL - EXHAUSTION
3. ALL ENGINES

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. OBJECT - TREE(S)

Factual Information

On August 2, 2003, about 1301 eastern daylight time, a Piper PA-31-310, registered to and operated by a private owner as a Title 14 CFR Part 91 personal flight crashed into an orange grove in Jupiter, Florida. Visual meteorological conditions prevailed, and an instrument flight rules flight plan had initially been filed. The private-rated pilot and one passenger received minor injuries, and the airplane incurred substantial damage. The flight originated in Canton, Ohio, the same day, about 0830.

The pilot stated that he and his wife departed from the Canton Regional Airport, Canton, Ohio, shortly after 0800, en route to Fort Lauderdale Florida, to attend a conference aboard a cruise ship, scheduled to leave port Everglades, Florida, at 1700. He further stated that when he departed, both fuel tanks were full of fuel, and the fuel selectors were set to the inboard tanks. During the en route phase, he said he leaned the fuel mixture to establish a burn rate of 15.5 gallons per hour for each engine, and maintained this setting throughout the remainder of the flight, until the initial descent. After 1 1/2 hours the fuel gauges pertaining to the inboard tanks showed half a tank of fuel for both tanks. At this point, the pilot said he switched to the outboard tanks which were full of fuel. He said the outboard tanks were then used for the following 2 hours, until the fuel gauges showed that the tanks were 1/4 full. He further said that he believed enough fuel remained in the inboard tanks to reach his destination, and still have the required reserve for VFR operations. While descending to 2,500 feet, the pilot said he was vectored around thunderstorms, and when approximately 12 miles north of Palm Beach International Airport (PBI) the left engine began to surge. At that point, he noticed that both of the inboard fuel gauges showed that the tanks were empty, so he selected the outboard tanks, which had both their indicators showing 1/4 full. The pilot said that 2 minutes later both engines began to surge again, and he then made an emergency radio communications call requesting vectors to the nearest airport. He was advised of the Tailwinds Airport, Jupiter, Florida, which was located 4 miles to the west of his location, but he was unable to reach it, so he made a forced landing in an orange grove. The pilot also said that prior to the accident there had not been any mechanical failure or malfunction to the airplane or any of its systems.

An FAA inspector who responded to the accident scene, stated that he observed no evidence of fuel at the scene. Follow-on examination of the airplane revealed no anomalies with the airplane, its fuel system, or its engines.

Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/15/2003
Occupational Pilot:		Last Flight Review or Equivalent:	08/20/2002
Flight Time:	1106 hours (Total, all aircraft), 29 hours (Total, this make and model), 1014 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N876RD
Model/Series:	PA-31-310	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	31-7300974
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	06/10/2003, Annual	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	1493 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	TIO-540-A
Registered Owner:	PLF Aviation, Inc.	Rated Power:	310 hp
Operator:	Perry L Fleisher	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PBI, 19 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	1253 EST	Direction from Accident Site:	350°
Lowest Cloud Condition:	Scattered / 2100 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.05 inches Hg	Temperature/Dew Point:	29° C / 24° C
Precipitation and Obscuration:			
Departure Point:	Canton, OH (CAK)	Type of Flight Plan Filed:	VFR/IFR
Destination:	Fort Lauderdale, FL (FXE)	Type of Clearance:	IFR; VFR; VFR Flight Following
Departure Time:	0830 EDT	Type of Airspace:	Class E

Airport Information

Airport:	Tailwinds Airport (FD15)	Runway Surface Type:	Unknown
Airport Elevation:	19 ft	Runway Surface Condition:	Unknown
Runway Used:	NA	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	26.914167, -80.205278

Administrative Information

Investigator In Charge (IIC):	John W Lovell	Report Date:	03/30/2005
Additional Participating Persons:	Lloyd Morgan; Federal Aviation Administration; Fort Lauderdale, FL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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