



Aviation Investigation Final Report

Location:	FORT PIERCE, Florida	Accident Number:	MIA85FLD02
Date & Time:	May 12, 1985, 15:50 Local	Registration:	N7315D
Aircraft:	PIPER PA-22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

PRIOR TO A FLT FROM THE BAHAMAS TO WEST PALM BEACH, FL, THE PLT NOTED A PROBLEM WITH THE QUICK-DRAIN FOR THE LEFT FUEL TANK. AFTER LANDING IN WEST PALM BEACH, FUEL WAS ONLY ADDED TO THE RIGHT TANK SINCE THE PLT ANTICIPATED REPLACING THE LEFT QUICK-DRAIN. ON THE NEXT FLT TO VERO BEACH, FL, HE WAS USING FUEL FROM THE LEFT TANK, WHEN THE ENG 'HESITATED.' AT THAT TIME, THE LEFT FUEL GAGE WAS INDICATING UNDER 1/4 FULL. THE PLT CHECKED THE MAGS & 'FOUND THE LEFT MAG WAS ROUGH.' WHILE COMPARING THE MAGS & CALLING VERO BEACH TOWER, THE ENG POWER 'FELL TO IDLE' WHEN THE ACFT WAS AT AN ALT OF ABOUT 1000 FT. THINKING HE HAD A MAG PROBLEM, THE PLT CONTINUED SWITCHING MAGS & DELAYED SWITCHING THE FUEL SELECTOR. SUBSEQUENTLY, HE MADE A FORCED LANDING ON A SANDY AREA WHERE THE RIGHT GEAR FOLDED & THE RIGHT ELEVATOR WAS DAMAGE. ONLY A FEW OUNCES OF FUEL WAS FOUND IN THE LEFT TANK. A CONSIDERABLE AMOUNT OF FUEL WAS STILL REMAINING IN THE RIGHT FUEL TANK. ALSO, WATER & DIRT WERE FOUND IN THE RIGHT TANK & ABOUT 1 OUNCE OF WATER WAS IN THE FUEL LINES.

Probable Cause and Findings

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

Findings

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

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
3. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND
4. (C) FLUID,FUEL - STARVATION
5. (C) FUEL TANK SELECTOR POSITION - NOT CORRECTED - PILOT IN COMMAND

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

Findings

6. (F) EMERGENCY PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #3: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

7. (F) TERRAIN CONDITION - LOOSE GRAVEL/SANDY
8. (F) TERRAIN CONDITION - SOFT
9. LANDING GEAR,MAIN GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Commercial	Age:	45, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	October 20, 1983
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1402 hours (Total, all aircraft), 73 hours (Total, this make and model), 13067 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7315D
Model/Series:	PA-22-150 PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-5103
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	June 9, 1984 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	83 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1558 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	WILLIAM R. HAWN	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	VRB	Distance from Accident Site:	
Observation Time:	16:00 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2000 ft AGL	Visibility	20 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 12 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	WEST PALM BEACH, FL (PBI)	Type of Flight Plan Filed:	None
Destination:	VERO BEACH, FL (VRB)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	UNKNOWN	Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Inglima, Thomas
Additional Participating Persons:	JOHN ZIELINSKY; ORLANDO , FL
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=31271

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).