

Aviation Investigation Final Report

Location: LANTANA, Florida Accident Number: ATL98LA113

Date & Time: August 15, 1998, 11:30 Local Registration: N8WP

Aircraft: Cessna 305 Aircraft Damage: Substantial

Defining Event: 2 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot completed an extensive preflight inspection of the airplane that included draining both fuel sumps; there was no sediment or water found in the fuel. After the preflight inspection, the pilot taxied the airplane to the run-up area adjacent to runway 15. The pilot reported that the 'pre-departure run-up' was normal, and that the power application for the takeoff was also normal. As the airplane climbed through 400 feet, the pilot recalled that the engine hesitated and lost power. As the pilot attempted to restore full engine power, by adjusting the throttle, the engine backfired. The pilot elected to attempt a forced landing on the remaining runway. The airplane touched on the runway, and rolled off the departure end of runway 15 into a grassy area. The pilot reported that the airplane nosed over as it stopped in the rough grassy area. During the subsequent examination of the airplane, both fuel tanks were drained of remaining fuel. During this phase of the recovery and examination, several ounces of water were also recovered from the left fuel tank. Examination of the airframe and subsystems failed to disclose a mechanical problem.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection of the fuel system that resulted in the loss of engine power due to water contamination. A factor was the rough terrain on the departure end of the runway.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) FLUID, FUEL - CONTAMINATION, WATER

2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING Phase of Operation: CLIMB - TO CRUISE

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

Findings

3. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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Factual Information

On August 15, 1998, at 1130 eastern daylight time, a Cessna 305, N8WP, collided with the ground, according to the pilot, while attempting a takeoff from runway 15 at the Palm Beach County Air Park, in Lantana, Florida. The personal flight was operated by the pilot under the provisions of Title 14 CFR Part 91 with no flight plan filed. A review of weather data disclosed that visual weather conditions prevailed at the time of the accident. Examination of the airplane at the accident site disclosed that the airframe sustained substantial airframe damage. The commercial rated pilot and his passenger received minor injuries. The accident occurred during the initial takeoff from Lantana, Florida.

The pilot reported that he completed an extensive preflight inspection that included the draining of both fuel sumps. According to the pilot, there was no sediment or water found in the fuel samples. During the preflight inspection, the pilot visually confirmed that both fuel tanks had been topped off, as he had requested, by the Fixed Based Operator. After the preflight inspection, the pilot taxied the airplane to the run-up area adjacent to runway 15. The pilot reported that the "pre-departure run-up" was normal.

During the power application for the takeoff, the pilot recalled that engine operation was normal. As the airplane climbed through 400 feet, the pilot recalled that the engine hesitated and lost power. As the pilot attempted to correct the hesitation by adjusting the throttle, the engine backfired. Still above the runway, the pilot attempted a forced landing on the remaining runway. The airplane touched down on the runway, and rolled off the departure end of the hard surface into a grassy area. The pilot reported that the airplane nosed over as it stopped in the rough grassy area.

According to the Fixed Based Operator, the airplane was placed back on the main landing gear during the recovery process. During the subsequent examination of the airplane both fuel tanks were drained of remaining fuel. During this phase of the recovery and examination, several ounces of water were also recovered from the left fuel tank. Examination of the airframe and sub-systems failed to disclose a mechanical problem. The fuel selector position was not determined.

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Pilot Information

Certificate:	Commercial	Age:	49,Male
Airplane Rating(s):	None	Seat Occupied:	Front
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 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	April 21, 1998
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	700 hours (Total, all aircraft), 75 hours (Total, this make and model), 625 hours (Pilot In Command, all aircraft), 75 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8WP
Model/Series:	305 305	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility; Restricted (Special)	Serial Number:	23521
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 1, 1998 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4145 Hrs	Engine Manufacturer:	Continental
ELT:	Not installed	Engine Model/Series:	0-470
Registered Owner:	U.S. INVESTAIR INC,.	Rated Power:	213 Horsepower
Operator:	RONALD KROLICK	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PBI ,12 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	355°
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	(LNA)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:14 Local	Type of Airspace:	Class G

Airport Information

Airport:	PALM BEACH COUNTY AIRPARK LNA	Runway Surface Type:	Asphalt
Airport Elevation:	106 ft msl	Runway Surface Condition:	Dry
Runway Used:	15	IFR Approach:	None
Runway Length/Width:	3485 ft / 150 ft	VFR Approach/Landing:	Forced landing

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:	26.5795,-80.0708(est)

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Administrative Information

Investigator In Charge (IIC):	Powell, Phillip	
Additional Participating Persons:	EDWARD ROWLETT; FT LAUDERDALE , FL	
Original Publish Date:	July 26, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=43648	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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