



National Transportation Safety Board Aviation Accident Final Report

Location:	BEAUFORT, SC	Accident Number:	ATL96LA031
Date & Time:	12/01/1995, 1700 EST	Registration:	N8779U
Aircraft:	CESSNA 150M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

After adding 6 gallons of fuel to the right fuel tank, the dual student checked the fuel tank sumps, completed the pre-flight inspection, and then took off. The instructor stated that during cruise flight, the engine lost power. An emergency landing was attempted on a beach. On the landing roll the airplane struck a tree stump. Post accident investigation by the instructor revealed water in both fuel tanks.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: An inadequate preflight which resulted in water contamination in the fuel system and the subsequent loss of engine power. The tree stump was a factor.

Findings

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

Findings

1. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND(CFI)
2. (C) FLUID,FUEL - CONTAMINATION,WATER

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

3. (C) OBJECT - TREE(S)

Factual Information

On December 1, 1995, about 1700 eastern standard time, a Cessna 150M, N8779U, collided with a tree stump during a forced landing near Beaufort, South Carolina. The aircraft was operated by Master Aviation under the provisions of 14 CFR Part 91, and visual flight rules. A flight plan was not filed for the instructional flight. There were no injuries to the commercial flight instructor, nor the student, and the aircraft was substantially damaged. The flight departed Hilton Head, South Carolina, at 1600 on the same day.

The pilot reported that he fueled the airplane at Hilton Head, prior to takeoff, with six gallons of aviation gasoline. All six gallons were added to the right tank. About ten minutes after refueling, the student pilot performed a pre-flight inspection, that included sampling the fuel from the tank drains. Shortly after take off, while the aircraft was in cruise flight, the engine quit. The instructor executed a forced landing. On landing roll, the aircraft struck a tree stump, twisting the fuselage, and buckling the tail cone. The pilot stated that after the forced landing, he drained fuel from the right wing and the sump. According to him, both samples contained water. Upon further examination of the engine, no other engine problems were found.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	25, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/12/1995
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	386 hours (Total, all aircraft), 102 hours (Total, this make and model), 305 hours (Pilot In Command, all aircraft), 122 hours (Last 90 days, all aircraft), 46 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N8779U
Model/Series:	150M 150M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15077987
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	11/22/1995, Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	12 Hours	Engines:	1 Reciprocating
Airframe Total Time:	6296 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	O-200A
Registered Owner:	GREG FOX	Rated Power:	100 hp
Operator:	MASTER AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	NBC, 38 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	2156 EST	Direction from Accident Site:	195°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	17° C / 8° C
Precipitation and Obscuration:			
Departure Point:	HILTON HEAD, SC (49J)	Type of Flight Plan Filed:	None
Destination:	, SC (73J)	Type of Clearance:	None
Departure Time:	1555 EST	Type of Airspace:	Class D

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	04/01/1996
Additional Participating Persons:	LEWIS BLACKWELL; COLUMBIA, SC		
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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