



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Flora, MS	<b>Accident Number:</b>	DFW08LA018
<b>Date &amp; Time:</b>	10/20/2007, 1415 CDT	<b>Registration:</b>	N6157G
<b>Aircraft:</b>	Cessna 150K	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None

**Flight Conducted Under:** Part 91: General Aviation - Instructional

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## Analysis

While conducting a go-around from a simulated forced landing, the airplane experienced a total loss of engine power. Low altitude precluded an engine restart and the flight instructor elected to conduct a forced landing in a nearby corn field. Unable to align with the plowed rows, the flight instructor landed perpendicular to the rows and subsequently nosed over. Analysis of the engine revealed fuel contaminated with water in the gascolator and carburetor bowl. The inspecting personnel reported that both components were properly sealed to prevent water intrusion.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of engine power due to fuel contamination. A contributing factor was the lack of suitable terrain for the forced landing.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: GO-AROUND (VFR)

### Findings

1. (C) FUEL SYSTEM,GASCOLATOR - CONTAMINATION,WATER
2. (C) FUEL SYSTEM,CARBURETOR - CONTAMINATION,WATER

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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

Phase of Operation: EMERGENCY LANDING

### Findings

3. (F) TERRAIN CONDITION - PLOWED/FURROWED
4. (F) TERRAIN CONDITION - NONE SUITABLE

## Factual Information

### HISTORY OF FLIGHT

On September 20, 2007, at approximately 1415 central daylight time, a single-engine Cessna 150K airplane, N6157G, sustained substantial damage during a forced landing following a reported loss of engine power near Flora, Mississippi. The flight instructor and the student pilot receiving instruction were not injured. The airplane was owned and operated by a private individual. Visual meteorological conditions prevailed for the instructional flight conducted under 14 Code of Federal Regulations Part 91. The flight departed as a round-robin flight from the Hawkins Field Airport (HKS) near Jackson, Mississippi.

The flight instructor reported during a telephone interview, that the student pilot had performed a simulated forced landing and in order to expedite the descent, the airplane was side-slipped. After properly aligning for approach, the student pilot executed a go-around. The engine operated normally for about 30 seconds until the engine lost power. The aircraft was approximately 200 to 300 feet above the ground in nose-high attitude when the flight instructor took control of the aircraft. Due to airspeed and altitude, the flight instructor elected to land the airplane in a nearby corn field. The low altitude did not allow the flight instructor to align the aircraft with the corn rows and when the aircraft touched down perpendicular to the corn rows the nose gear dug into the soft dirt and was sheared-off. The nose gear strut dug into the soil and the airplane nosed over. The airplane continued skidding tail-first, inverted, before coming to rest in the inverted position. Both pilots were uninjured and were able to egress the aircraft.

### DAMAGE TO AIRPLANE

The spinner cone was crushed and bent. The undercarriage of the aircraft sustained several dents from the nose to the tail. The nose gear was sheered off. The empennage was buckled. The top of the rudder was crushed in. Both wings sustained dents and the area near the wingtips suffered heavy damage and tearing.

### PERSONNEL INFORMATION

The flight instructor, age 54, held a flight instructor certificate with airplane single-engine, airplane multi-engine, and instrument airplane ratings. In addition, he possessed a commercial certificate with single-engine land, multi-engine land, single-engine sea, and airplane instrument ratings. A valid second-class medical certificate was issued on November 4, 2006. The flight instructor reported 11,718 total hours, 9,168 instructor hours, and 1,819-hours in the same make and model.

The student pilot, age 54, held a student pilot certificate. A valid third-class medical certificate was issued on December 6, 2005. The student reported 80 total hours, with 80 hours in same make and model.

### AIRPLANE INFORMATION

The single-engine, high wing, fixed landing gear, two seat airplane was manufactured in 1969. The two-bladed McCauley propeller was powered by a Teledyne Continental Motors O-200-A, serial number 20569-9-A, rated at 100 horsepower.

### METEOROLOGICAL CONDITIONS

At 1353, an automated weather reporting station at Jackson Hawkins Field, located 13 nautical miles to the south-east of the accident site report winds calm, 10 statute miles visibility, clear skies, temperature 80 degrees Fahrenheit, dew point 39 degrees Fahrenheit, and a barometric pressure of 30.03 inches of Mercury.

The meteorological conditions present were not conducive to carburetor icing.

The airplane was tied down on the ramp at Jackson Hawkins Field. In the days prior to the accident, rain fall was light, with the largest sum of 0.52 inches falling on October 17.

#### TESTS AND RESEARCH

On December 10, 2007 an examination was conducted by a representative from Teledyne Continental Engines under the supervision of an FAA inspector from the Little Rock FSDO. No mechanical anomalies were discovered during the inspection. Contaminated fuel was found in the engine gascolater and carburetor fuel bowl. Both contaminated fuel samples tested positive for the presence of water using Sar-Gel. The gascolater and carburetor appeared to be properly sealed. The gascolater was disassembled and found to contain rust of the center shaft and bottom of the bowl portion. Since an engine run was planned, the carburetor was not disassembled. Once all components were reinstalled, an engine run was conducted and the engine was able to produce power.

According to FBO personnel, no reports of fuel contamination were received at Jackson Hawkins Field.

#### ADDITIONAL INFORMATION

In a telephone interview, the flight instructor reported that a normal preflight was accomplished prior to takeoff.

On the NTSB Form 6120.1 the flight instructor stated that since flight had occurred for 30 minutes prior to the accident, water may have pooled in the wings which was disrupted during the side-slip maneuver.

#### Student Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With Waivers/Limitations	<b>Last FAA Medical Exam:</b>	12/01/2005
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	80 hours (Total, all aircraft), 80 hours (Total, this make and model), 18 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	54, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With Waivers/Limitations	<b>Last FAA Medical Exam:</b>	11/01/2006
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	05/01/2006
<b>Flight Time:</b>	11718 hours (Total, all aircraft), 1819 hours (Total, this make and model), 11606 hours (Pilot In Command, all aircraft), 482 hours (Last 90 days, all aircraft), 150 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N6157G
<b>Model/Series:</b>	150K	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	15071657
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	10/01/2007, Annual	<b>Certified Max Gross Wt.:</b>	1600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Teledyne Continental
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-200-A
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	100 hp
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	HKS, 341 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	1353 CDT	Direction from Accident Site:	140°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	27° C / 4° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	JACKSON, MS (HKS)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1345 CDT	Type of Airspace:	

## 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:	32.527222, -90.354722

## Administrative Information

Investigator In Charge (IIC):	Jason Aguilera	Report Date:	01/31/2008
Additional Participating Persons:	Theo A Mavridoglou; FAA FSDO; Jackson, MS Rodney Martinez; Teledyne Continental Motors; Mobile, AL Bill R Kelly; FAA FSDO; Little Rock, AR		
Publish Date:	06/17/2019		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).