



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	DAYTONA BEACH, FL	<b>Accident Number:</b>	MIA97LA054
<b>Date &amp; Time:</b>	01/01/1997, 1341 EST	<b>Registration:</b>	N5813G
<b>Aircraft:</b>	Cessna 150K	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Serious

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

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## Analysis

Before the first of several legs of flight, the pilot used a wooden stick to confirm the fuel quantity, since one of the fuel gauges was inoperative. He then departed, performed airwork, and continued to a landmark, where a flyby was performed. The pilot landed at an airport, remained a short time, then during the preflight, he noted that the fuel quantity indicated about 1/2. The flight departed, and the pilot flew to another airport, and performed a full stop landing with taxiback. He then departed on a return flight to the original departure airport, where he performed two touch-and-go landings. During the takeoff roll of the third touch-and-go, the pilot noted that the engine was not producing full power; however, with insufficient runway remaining to stop, he elected to continue. About 200 feet above ground level, the engine coughed, then the propeller stopped. Subsequently, the airplane collided with concrete blocks during a forced landing. The pilot stated to a police officer that he believed the engine quit because he ran out of fuel. Postcrash examination of the airplane by an FAA inspector revealed 3.0 gallons of fuel remaining in the fuel tanks. According to the airplane type certificate data sheet, the unusable fuel quantity was 3.5 gallons. Following recovery of the airplane, the engine was started, and it operated to 750 rpm. Impact damage precluded operating the engine to a higher rpm.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's improper planning/decision, by failing to ensure there was sufficient fuel for continued flight, which resulted in fuel exhaustion and subsequent collision with objects (concrete blocks) during a forced landing. Factors relating to the accident were: a partially inoperative fuel gauge, which provided a false fuel indication, and the pilot's operation of the airplane with the known deficiency.

## Findings

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

### Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
3. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - INTENTIONAL - PILOT IN COMMAND
4. (C) FLUID,FUEL - EXHAUSTION
5. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: EMERGENCY LANDING

## Factual Information

On January 1, 1997, about 1341 eastern standard time, a Cessna 150K, N5813G, registered to a private individual, was substantially damaged during a forced landing near the Daytona Beach Regional Airport, Daytona Beach, Florida. Visual meteorological conditions prevailed at the time and no flight plan was filed for the 14 CFR Part 91 personal flight. The private-rated pilot and one passenger sustained serious injuries. The flight originated about 1 minute earlier from the Daytona Beach Airport.

The pilot stated that before departure he was aware that one of the fuel gauges was inoperative and during the preflight of the airplane he used a wooden stick that was labeled half and full. Before departure on the first leg the fuel tanks were slightly less than full. The flight departed, performed airwork, then flew south to the Kennedy Space Center (KSC) where a fly-by was performed. The flight continued south of the KSC and performed a full stop landing at an airport. Before departure the pilot checked the fuel tanks using the stick and it indicated 1/2. The flight departed and he performed a full stop landing with taxi back at another airport then continued to the Daytona Beach Airport. He performed two touch-and-go landings then during the landing roll of the third, after applying power to go around, he recognized that the engine was not developing full power. With insufficient runway remaining, he elected to continue and about 200 feet above ground level, the engine began coughing and the propeller stopped. With obstructions ahead the pilot intentionally stalled the airplane which collided with concrete blocks. He further stated to a police officer that the engine may have quit because he ran out of fuel.

The airplane was examined the following day by an FAA airworthiness inspector who stated that when he arrived, the airplane was in the process of being dismantled. The non-ruptured fuel tanks were drained and found to contain 3.0 gallons of fuel. According to the airplane type certificate data sheet, the total unusable fuel quantity is 3.5 gallons.

Following recovery of the airplane the engine was started and operated to about 750 rpm. Impact damage prevented engine operation to full rated rpm. No discrepancies were noted during the engine run.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	23, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<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>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	07/12/1995
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	138 hours (Total, all aircraft), 3 hours (Total, this make and model), 87 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5813G
Model/Series:	150K 150K	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	15071313
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	12/07/1996, 100 Hour	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	70 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4609 Hours	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	O-200-A
Registered Owner:	WILLIAM BECK	Rated Power:	100 hp
Operator:	WILLIAM BECK	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DAB, 35 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1353 EST	Direction from Accident Site:	270°
Lowest Cloud Condition:	Scattered / 3400 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23° C / 19° C
Precipitation and Obscuration:			
Departure Point:	(DAB)	Type of Flight Plan Filed:	None
Destination:	(DAB)	Type of Clearance:	None
Departure Time:	1340 EST	Type of Airspace:	Class C

## Airport Information

Airport:	DAYTONA BEACH INTL (DAB)	Runway Surface Type:	Asphalt
Airport Elevation:	35 ft	Runway Surface Condition:	Dry
Runway Used:	7R	IFR Approach:	
Runway Length/Width:	3197 ft / 100 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Serious	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Serious	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	TIMOTHY W MONVILLE	<b>Report Date:</b>	09/30/1997
<b>Additional Participating Persons:</b>	STANLEY F OKON; ORLANDO, FL		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	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.ntsbt.gov/pubdms/">http://dms.ntsbt.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](#).