

Aviation Investigation Final Report

Location:	Okeechobee, Florida	Accident Number:	MIA07CA064
Date & Time:	March 24, 2007, 15:00 Local	Registration:	N704HF
Aircraft:	Cessna 150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that 9.5 gallons of fuel was onboard the airplane before takeoff. He cruised at an altitude of 3,500 mean sea level, for a flight of about 51 nautical miles, with an indicated airspeed of 110 knots. During final approach, about 250 feet above ground level, the airplane had a loss of engine power, and the pilot elected to land on the grass prior to the runway. The airplane impacted a ditch about 255 feet from the runway's threshold, and become airborne again. The nose gear bent, and the bottom cowling was damaged before it came to a stop. A person from the airport with a tractor assisted in towing the airplane into a hanger. As the airplane was towed, the pilot said he noticed fuel leaking from the airplane, and reached inside the cabin and turned the fuel selector valve off. The person who assisted the pilot stated to the airport manager that he did not see any fuel leaking during the recovery process, and confirmed with the pilot that the fuel selector valve was in the off position before the airplane was moved. The FAA inspector that conducted the postaccident examination drained 1.25 gallons of fuel from each wing tank, for a total of 2.5 gallons. The airplane's unusable fuel is 3.5 gallons.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to refuel the airplane prior to fuel exhaustion, which resulted in a loss of engine power during final approach, and a collision with a ditch.

Findings

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

Findings

1. (C) FLUID, FUEL - EXHAUSTION 2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - ROLL

Findings
3. TERRAIN CONDITION - DITCH

Factual Information

The pilot stated that he completed a preflight and noted the airplane had 50 minutes worth of fuel. He arranged to have 4 more gallons of fuel added, which brought a total of 9.5 gallons of fuel onboard the airplane. He took a direct heading to Okeechobee after departure, cruising at 3,500 means sea level. The flight distance was about 51nactical miles with about 12 to 18 knots, northeast wind condition, giving an indication of 110 knots. He elected to land on runway 5 and was second to land, following another airplane in the downwind. During final, at about 250 feet above ground level, the airplane had a loss of engine power. He verified the engine controls; however, he had no time for an engine restart at the attitude the airplane was at. He elected to land on the grass prior to the runway. The airplane impacted with a 10 foot wide ditch about 255 feet from the runway's threshold and become airborne again. The nose gear bent and the bottom cowling was damaged before it came to a stop. He exited the airplane after securing the master switch and the magnetos. A gentleman from the airport came over with a tractor and assisted him in towing the airplane into a hanger. As the airplane was towed, he noticed fuel leaking from the airplane. He reached inside the cabin area and turned the fuel selector valve off. This was about 35-40 minutes after the incident occurred.

The person who assisted the pilot in recovery of the airplane from the accident site stated to the airport manager that he did not observe any fuel leaking from the airplane during the recovery process. He confirmed with the pilot that the fuel selector valve was in the off position before the airplane was moved. The FAA inspector that conducted the post accident examination of the airplane stated he drained 1.25 gallons of fuel from each wing tank. A total of 2.5 gallons of fuel was collected. The airplane's unusable fuel is 3.5 gallons as noted in the airplane's Type Certificate Data Sheet, 3A19.

Pilot Information

Certificate:	Private	Age:	27,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	December 1, 2005
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 1, 2006
Flight Time:	311 hours (Total, all aircraft), 129 hours (Total, this make and model), 216 hours (Pilot In Command, all aircraft), 71 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N704HF
Model/Series:	150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	15078618
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	May 1, 2006 Annual	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	67.7 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7883 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	0-200-A
Registered Owner:	Robert S. Varney	Rated Power:	100 Horsepower
Operator:	Robert S. Varney	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOBE,34 ft msl	Distance from Accident Site:	
Observation Time:	14:25 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 4800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 17 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.22 inches Hg	Temperature/Dew Point:	29°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MELBOURNE, FL (KMLB)	Type of Flight Plan Filed:	None
Destination:	OKEECHOBEE, FL (KOBE)	Type of Clearance:	VFR
Departure Time:	14:30 Local	Type of Airspace:	

Airport Information

Airport:	OKEECHOBEE COUNTY OBE	Runway Surface Type:	Asphalt
Airport Elevation:	34 ft msl	Runway Surface Condition:	Dry
Runway Used:	050	IFR Approach:	Visual
Runway Length/Width:	5000 ft / 100 ft	VFR Approach/Landing:	Forced landing;Full stop:Traffic pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Obregon, Jose
Additional Participating Persons:	Frank Reos; Orlando Fsdo; Orlando, FL
Original Publish Date:	August 30, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=65461

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.