Aviation Investigation Final Report

Location:	Charlotte, North Carolina	**Accident Number:**	ATL05CA063
Date & Time:	March 18, 2005, 18:53 Local	**Registration:**	N7148M
Aircraft:	Cessna 175	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

The pilot stated that he departed Charlotte Douglas international Airport and climbed to 2,000 feet. The engine sputtered and lost power. He pulled the carburetor heat out, checked the magnetos, mixture full rich, and verified with his hand that the fuel selector was on both. He made a left turn back towards the airport and declared an emergency. The pilot made an emergency landing to a parking lot. The airplane collided with a curb, nosed over against a boulder, and a private automobile. The pilot stated that his mechanic changed the oil in his airplane before the first flight of the day. The mechanic informed the pilot that he had moved the fuel selector to the off position. The pilot stated he did not check the fuel selector valve during his preflight nor did he visually check it when the engine quit.. The pilot reported he did not verify the fuel selector valve position which resulted in a loss of engine power due to fuel exhaustion." On scene examination of the fuel selector valve by the FAA revealed the fuel selector valve was in the off position and no anomalies were noted with the fuel selector valve. Review of the Cessna 175 Owner's Manual states in Figure 10. Exterior Inspection Diagram, "1. b. Turn off master switch, check ignition switch for "OFF" position, check tank selector on "BOTH." The Owner's Manual further sates on page 2-4, "BEFORE LANDING. (1) Set fuel selector to "both tanks."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to follow the checklist by his failure to verify the fuel selector was in the on position which resulted in fuel starvation and the loss of engine power.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: DESCENT - EMERGENCY

Findings
1. FLUID,FUEL - STARVATION
2. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND
3. (C) FUEL MANAGEMENT - IMPROPER - PILOT IN COMMAND
4. FUEL TANK SELECTOR POSITION - NOT VERIFIED - PILOT IN COMMAND

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

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

Findings
5. OBJECT - OTHER

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On March 18, 2005, at 1853 Eastern Standard Time, a Cessna 175, N7148M, registered to AIRSIGN LLC, operating as a 14 CFR Part 91 positioning flight , reported a loss of engine power while in cruise flight and made an emergency landing to a parking lot. Visual meteorological conditions prevailed and no flight plan was filed. The airplane received substantial damage. The commercial pilot reported minor injuries. The flight originated from Charlotte Douglas International Airport, Charlotte, North Carolina, on March 18, 2005, between 1848 and 1850.

The pilot stated he departed Charlotte and climbed to 2,000 feet and was flight following with Charlotte Approach Control. The engine sputtered and quit. He pulled the carburetor heat out, checked the magnetos, mixture full rich, and verified with his hand that the fuel selector was on both. He made a left turn back towards the airport and declared an emergency. The pilot stated he was cleared by the controller to land on runway 18. The pilot informed the controller he was unable to make the runway and he was making an emergency landing on a road. The pilot observed a parking lot and made an emergency landing under some wires. The airplane bounced on touch down, collided with a curb, nosed over inverted against a bolder, and a private automobile.

The pilot stated in a subsequent statement that his mechanic changed the oil in his airplane before the first flight of the day. The mechanic informed the pilot that he had moved the fuel selector to the off position. The pilot stated he did not check the fuel selector valve during his preflight nor did he visually check the fuel selector when the engine quit.. The pilot stated, "I screwed up by not verifying the fuel selector valve position which resulted in a loss of engine power due to fuel starvation." On scene examination of the fuel selector valve by the FAA revealed the fuel selector valve was in the off position, and no anomalies were noted with the fuel selector valve.

Review of the Cessna 175 Owner's Manual states in Figure 10. Exterior Inspection Diagram, "1. b. Turn off master switch, check ignition switch for "OFF" position, check tank selector on "BOTH." The Owner's Manual further sates on page 2-4, "BEFORE LANDING. (1) Set fuel selector to "both tanks."

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	37,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	August 30, 2004
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	4500 hours (Total, all aircraft), 1000 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N7148M
Model/Series:	175	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	55448
Landing Gear Type:	Tailwheel	**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	0-470
Registered Owner:	AIRSIGN LLC	**Rated Power:**	225 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	CLT,748 ft msl	**Distance from Accident Site:**	6 Nautical Miles
Observation Time:	18:15 Local	**Direction from Accident Site:**	290°
Lowest Cloud Condition:	Few / 2500 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	11°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Charlotte, NC (CLT)	**Type of Flight Plan Filed:**	None
Destination:	Charlotte, NC (28A)	**Type of Clearance:**	VFR
Departure Time:	18:50 Local	**Type of Airspace:**	Class G

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	35.21389,-80.943054

Administrative Information

Investigator In Charge (IIC):	Smith, Carrol
Additional Participating Persons:	Hal Kennedy; Charlotte FSDO-03; Charlotte, NC
Original Publish Date:	July 7, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61169