



Aviation Investigation Final Report

Location:	Farmingdale, New Jersey	Accident Number:	ERA12LA470
Date & Time:	July 21, 2012, 16:00 Local	Registration:	N2166G
Aircraft:	Cessna 182A	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The pilot was returning to the airport after dropping off parachutists at 9,000 feet. He said that the flight lasted about 30 minutes, and as he turned onto final approach in the traffic pattern, he pulled the throttle back, and the engine lost power. The pilot performed a forced landing in a field, and the airplane struck some power poles lying on the ground, resulting in substantial damage to the airframe. Postaccident examination of the airframe and engine revealed no evidence of a mechanical malfunction or anomaly that would have precluded normal operation. Only residual fuel was recovered from the wing tanks, and there was no fuel in the line from the tanks to the engine. The pilot stated that he should have monitored his fuel gauges more closely.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot’s improper fuel management, which resulted in a total loss of engine power due to fuel exhaustion.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Fuel planning - Pilot

Factual Information

History of Flight

Approach	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing-landing roll	Collision with terr/obj (non-CFIT)

On July 21, 2012, about 1600 eastern daylight time, a Cessna 182A, N2166G, was substantially damaged following a loss of engine power and collision with terrain near Monmouth Executive Airport (BLM), Farmingdale, New Jersey. The certificated commercial pilot had minor injuries. The airplane was registered to a corporation and was operated by Skydive Jersey Shore under the provisions of 14 Code of Federal Regulations Part 91 as a skydiving flight. Visual meteorological conditions prevailed and no flight plan was filed. The local flight originated at BLM about 1530.

The pilot reported that he was returning to the airport after dropping parachutists at 9,000 feet. While approaching the airport, about 30 minutes into the flight, the engine lost power and stopped running. The pilot performed a forced landing in a field and the airplane collided with some poles lying on the ground and the nose gear collapsed.

Federal Aviation Administration inspectors responded to the accident site and examined the wreckage. The inspectors confirmed substantial damage to the fuselage. There was no evidence of external engine damage. The oil quantity was checked and found to be in the normal range. Little or no fuel was found in the left wing tank. The right wing tank quantity could not be determined due to the position of the right wing. The wreckage was recovered to a local maintenance facility where a subsequent examination of the airframe and engine was performed.

A yardstick was inserted into the right wing tank and the fuel level registered less than 0.75 inches. The total fuel recovered from the left wing tank was less than one quart. A fuel sample was taken from the gascolator and it was found to be blue in color and free of contaminants. The main fuel line from the wing tanks was loosened and the line was empty of fuel. The engine rotated freely when turned by hand.

The pilot reported that, after leveling off from the descent, that he should have made a more conscious effort to scan his instruments and gauges, with "special emphasis on fuel gauges." He also reported that he preflighted the fuel tanks with a wooden dipstick.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	22, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	July 17, 2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 19, 2011
Flight Time:	473 hours (Total, all aircraft), 174 hours (Total, this make and model), 386 hours (Pilot In Command, all aircraft), 106 hours (Last 90 days, all aircraft), 59 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N2166G
Model/Series:	182A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	51466
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	March 24, 2012 100 hour	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	92 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8190 Hrs at time of accident	Engine Manufacturer:	CONT MOTOR
ELT:	Installed, not activated	Engine Model/Series:	O-470 SERIES
Registered Owner:	CASEY AIR INC	Rated Power:	230 Horsepower
Operator:	Skydive Jersey Shore	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	NEL,101 ft msl	Distance from Accident Site:	14 Nautical Miles
Observation Time:	17:00 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:	Few / 3800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	24°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Farmingdale, NJ (BLM)	Type of Flight Plan Filed:	None
Destination:	Farmingdale, NJ (BLM)	Type of Clearance:	VFR
Departure Time:	15:30 Local	Type of Airspace:	

Airport Information

Airport:	Monmouth Executive BLM	Runway Surface Type:	
Airport Elevation:	153 ft msl	Runway Surface Condition:	Dry
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	7371 ft / 85 ft	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:	40.186943,-74.124443(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	Charles Emering; FAA/FSDO; Teterboro, NJ
Original Publish Date:	December 11, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=84403

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](#).