



# Aviation Investigation Final Report

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<b>Location:</b>	Melbourne, Florida	<b>Accident Number:</b>	ERA14LA344
<b>Date &amp; Time:</b>	July 10, 2014, 09:40 Local	<b>Registration:</b>	N128LS
<b>Aircraft:</b>	COSTRUZIONI AERONAUTICHE TECNA P2004 BRAVO	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of engine power (total)	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

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## Analysis

The private pilot departed on a cross-country flight in the light sport airplane. After leveling off at a cruise altitude about 2,500 ft, the pilot turned off the electric fuel pump and saw an initial decrease in fuel pressure followed by a return to the normal range. About 5-10 minutes later, the engine began to run rough, and the pilot turned on the electric fuel pump. The engine ran smoothly for a short time then experienced a total loss of power, and the pilot conducted a forced landing to a dirt road.

A postaccident test run of the engine revealed no anomalies when the engine was operated at low rpm. The engine could not be run at full power due to the damage sustained to its mounts during the forced landing. Based on the available information, the reason for the loss of engine power could not be determined.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

A total loss of engine power during cruise flight for reasons that could not be determined based on the available information.

## Findings

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**Not determined**

(general) - Unknown/Not determined

## Factual Information

### History of Flight

<b>Enroute-cruise</b>	Loss of engine power (total) (Defining event)
<b>Emergency descent</b>	Off-field or emergency landing
<b>Landing</b>	Hard landing

On July 10, 2014, about 0940 eastern daylight time, a Costruzioni Aeronautiche Tecna P2004 Bravo, N128LS, was substantially damaged during a forced landing following a total loss of engine power near Melbourne, Florida. The private pilot was not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the flight, which departed Orlando Apopka Airport (X04), Apopka, Florida, and was destined for Merritt Island Airport (COI), Merritt Island, Florida. The personal flight was operated under the provisions of Title 14 Code of Federal Regulations Part 91.

The pilot stated that a preflight inspection and engine run-up check revealed no anomalies. The takeoff was normal, and he climbed the airplane to a cruise altitude of 2,500 feet. Upon establishing the airplane in cruise flight, the pilot turned off the electric fuel pump and observed the fuel pressure gauge indicate an initial decrease, followed by an increase to the normal range. About five to ten minutes later, the engine began to run rough, and the pilot turned on the electric fuel pump. The engine ran smoothly for a short time, then experienced a total loss of power. The pilot subsequently conducted a forced landing to a dirt road.

The airplane was examined at the accident site by a Federal Aviation Administration inspector. The inspector stated that the wing fuel tanks each contained about 3 gallons of fuel, and that the engine firewall had sustained substantial damage. The airplane was then moved to X04 to facilitate further examination. Electrical power was applied to the airplane, and the operation of the electric fuel pump was verified. Fuel was plumbed to the engine, and the engine started and ran smoothly at low rpm with no anomalies observed. The engine could not be run at full power due to damage sustained to the engine mounts during the forced landing.

The 0953 weather observation at Melbourne International Airport (MLB), about 14 nautical miles southeast of the accident site, included clear skies, 10 miles visibility, wind from 190 degrees at 5 knots, temperature 28 degrees C, dew point 23 degrees C, and an altimeter setting of 30.14 inches of mercury.

The pilot held a private pilot certificate with a rating for airplane single-engine land. His most recent FAA third-class medical certificate was issued in January 2012. His total flight experience, as well as flight experience in the accident airplane make and model, was not determined.

The airplane was manufactured in 2006, and was equipped with a Rotax 912ULS, 100hp, reciprocating engine. The airplane's maintenance history was not determined. At the time of the accident, the airplane had accumulated 1,451.4 total hours.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	20, 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>	Unknown
<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 3 None	<b>Last FAA Medical Exam:</b>	January 4, 2012
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	March 8, 2013
<b>Flight Time:</b>	(Estimated) 0 hours (Total, all aircraft), 0 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	COSTRUZIONI AERONAUTICHE TECNA	<b>Registration:</b>	N128LS
<b>Model/Series:</b>	P2004 BRAVO	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	2006	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Special light-sport (Special)	<b>Serial Number:</b>	076
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	1320 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Rotax
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	912ULS
<b>Registered Owner:</b>	VALENCIC ADAM J	<b>Rated Power:</b>	100 Horsepower
<b>Operator:</b>	First Landings Aviation	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KMLB,27 ft msl	<b>Distance from Accident Site:</b>	14 Nautical Miles
<b>Observation Time:</b>	09:53 Local	<b>Direction from Accident Site:</b>	116°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	190°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	30.13 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Apopka, FL (X04 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Merritt Island, FL (COI )	<b>Type of Clearance:</b>	Unknown
<b>Departure Time:</b>	09:20 Local	<b>Type of Airspace:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	28.205278,-80.886108(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Diaz, Allison
<b>Additional Participating Persons:</b>	Antonio Gonzalez; FAA/FSDO; Orlando, FL
<b>Original Publish Date:</b>	May 1, 2017
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB did not travel to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=89687">https://data.ntsb.gov/Docket?ProjectID=89687</a>

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](#).