



Aviation Investigation Final Report

Location:	Orneville, Maine	Accident Number:	NYC06LA157
Date & Time:	June 24, 2006, 19:26 Local	Registration:	N536N
Aircraft:	WORCESTER EVERETT RENEGADE II	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot performed a preflight inspection prior to the accident flight, and departed with full fuel (approximately 13 gallons). After flying for approximately 30 minutes, the pilot decided to return to his home airstrip. When the airplane was approximately two miles from the airstrip, the airplane's engine "skipped" and then lost power. The pilot attempted to perform a forced landing to the grass strip, during which the airplane impacted trees and then the ground. The airplane and Rotax engine were completely consumed by a postcrash fire. Approximately 8 months prior to the accident, the pilot added a "fuel stabilizer chemical" to the automotive gasoline in the airplane, and the accident flight was the airplane's first flight since then.

Probable Cause and Findings

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

A loss of engine power for an undetermined reason.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: CRUISE

Findings

1. REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

2. OBJECT - TREE(S)

Factual Information

On June 24, 2006, at 1926 eastern daylight time, an amateur-built Renegade II, N536N, was destroyed when it impacted terrain during a forced landing in Orneville, Maine. The certificated private pilot was seriously injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local personal flight conducted under 14 Code of Federal Regulations Part 91.

According to the pilot, he departed from a private grass airstrip on the property of his primary residence. He then flew in the local area for about 30 minutes, and landed on a grass airstrip at a second property he owned. The pilot then departed again for the return flight to his primary residence approximately 4 miles away. When the airplane was approximately 2 miles from the primary field, the airplane's engine "skipped" and then lost power. The pilot attempted to perform a forced landing to the grass strip, during which the airplane impacted trees and then the ground.

Examination of the airplane by a Federal Aviation Administration (FAA) inspector revealed it was consumed by a postcrash fire. The fuel tanks were compromised, and the fuel lines were completely burnt through. The wooden propeller was fractured, and the Rotax engine was destroyed by fire.

The pilot reported that he added a "fuel stabilizer chemical" to the automotive gasoline in the airplane, in October 2005. The accident flight was the airplane's first flight since then. According to the pilot, he performed a preflight inspection prior to the accident flight; however, the airplane was not equipped with fuel sumps to check for fuel contamination or water. The pilot stated he departed with the fuel tanks full, approximately 13 gallons.

According to the manufacturer of the kit from which the accident airplane was built, these airplanes could be equipped with water drain fittings and a filter on the main fuel line to the engine, both of which could be removed by the pilot. Often, the fuel line filters were made of paper, which would disintegrate after a period of time, limiting fuel flow to the engine.

The weather reported at Bangor, Maine, approximately 28 miles to the south, at 1853, included winds from 150 degrees at 4 knots, a few clouds at 2,000 feet, broken clouds at 7,000 feet, 10 miles visibility, temperature 22 degrees Celsius (C), dew point 18 degrees C, and an altimeter setting of 30.12 inches of mercury.

Pilot Information

Certificate:	Private	Age:	67, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
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 3 With waivers/limitations	Last FAA Medical Exam:	June 1, 2005
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	533 hours (Total, all aircraft), 270 hours (Total, this make and model), 533 hours (Pilot In Command, all aircraft), 0 hours (Last 90 days, all aircraft), 0 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	WORCESTER EVERETT	Registration:	N536N
Model/Series:	RENEGADE II	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	023
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	April 1, 2006 Condition	Certified Max Gross Wt.:	850 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	315 Hrs as of last inspection	Engine Manufacturer:	Rotax
ELT:	Installed	Engine Model/Series:	503
Registered Owner:	Everett Wooster	Rated Power:	
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	BGR,192 ft msl	Distance from Accident Site:	28 Nautical Miles
Observation Time:	18:53 Local	Direction from Accident Site:	185°
Lowest Cloud Condition:	Few / 2000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 7000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	22°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Orneville, ME (NONE)	Type of Flight Plan Filed:	None
Destination:	Orneville, ME (NONE)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	Joe Simokaitis; FAA/FSDO; Portland, ME
Original Publish Date:	December 8, 2021
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64007

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](#).