



National Transportation Safety Board Aviation Accident Final Report

Location:	Richland, WA	Accident Number:	SEA07LA001
Date & Time:	10/01/2006, 1320 PDT	Registration:	N204BL
Aircraft:	Oneil Oneil Glassair II-S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

After takeoff and reaching an altitude of 1,000 feet above the ground, the engine surged and a reduction of power was observed; attempts to restore engine power were unsuccessful. The pilot decided to attempt a return to the airport; however, he elected to land in an adjacent field after determining he would not be able to make the runway. Subsequent impact with trees resulted in substantial damage to the airplane. A post-accident engine run did not reveal any anomalies which would have precluded normal operations. The reason for the partial loss of power could not be determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of partial engine power for undetermined reasons during the initial climb after takeoff. Trees were a factor during the landing roll.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

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

Findings

2. (F) OBJECT - TREE(S)

Factual Information

On October 1, 2006, about 1320 Pacific daylight time, an Oneil Glassair II-S experimental amateur-built airplane, N204BL, sustained substantial damage following a loss of engine power and impact with terrain near the Richland Airport, Richland, Washington. The airplane was registered to and operated by a private individual. The commercial pilot was not injured, and his sole passenger received minor injuries. Visual meteorological conditions existed for the personal flight, which was conducted in accordance with 14 CFR Part 91, and no flight plan was filed. The local flight was originating at the time of the accident.

According to the Pilot/Operator Aircraft Accident/Incident Report (NTSB Form 6120.1), and in telephone conversations with the NTSB investigator-in-charge (IIC), the pilot reported that after taking off and maintaining climb power until reaching 1,000 feet above ground level (agl), "...I reached for the throttle lever to reduce power to cruise climb, but the engine power surged down 20 per cent." The pilot stated that he then started a shallow left turn back to the airport, and after making a 180-degree turn noted that his airspeed had slowed to 100 miles per hour. The pilot reported that when he was about 1 mile from the runway at an altitude of 600 feet agl, he made the decision that he could not make it back to the runway. The pilot stated that he continued to turn to the 270-degree point in an attempt to land in a farm field, which was about one-quarter mile away. The pilot further stated that at about 100 feet agl he looked at the surface, and believing it was flat enough, lowered the landing gear. The pilot reported that he cleared the trees bordering the field on the east, landed, and then rolled approximately 1,000 feet before maneuvering to avoid a tree line on the west side of the field. The pilot further stated that after impacting two trees the airplane came to rest in the middle of a gravel road. The pilot reported that damage to the airplane included the nose gear and right main landing gear collapsing, aft crushing to the right wing spar, and the fuselage being bent and buckled. There was no post-crash fire. The pilot reported to the IIC that there were no anomalies noted with the airplane prior to the flight.

During a post-accident examination of the engine by a certified Federal Aviation Administration airframe and powerplant mechanic, the mechanic reported that no anomalies were noted which would have precluded normal operations. After the removal of the original propeller and the installation of an exemplar propeller, the engine was started and operated at 1,000, 1,500, and 1,800 revolutions per minute, with all indications reported as normal. The reason for the partial loss of engine power could not be determined.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	43, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 With Waivers/Limitations	Last FAA Medical Exam:	05/01/2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	633 hours (Total, all aircraft), 155 hours (Total, this make and model), 558 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Oneil	Registration:	N204BL
Model/Series:	Oneil Glassair II-S	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	WJO-2
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	05/01/2002, Annual	Certified Max Gross Wt.:	2100 lbs
Time Since Last Inspection:	20 Hours	Engines:	1 Reciprocating
Airframe Total Time:	155 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-360
Registered Owner:	William J. Oneil	Rated Power:	200 hp
Operator:	William J. Oneil	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAC, 410 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	1353 PDT	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	22° C / 5° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Richland, WA (RLD)	Type of Flight Plan Filed:	None
Destination:	Richland, WA (RLD)	Type of Clearance:	None
Departure Time:	1320 PDT	Type of Airspace:	

Airport Information

Airport:	Richland Airport (RLD)	Runway Surface Type:	Asphalt
Airport Elevation:	394 ft	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	4009 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	46.305556, -119.304167

Administrative Information

Investigator In Charge (IIC):	Thomas M Little	Report Date:	02/26/2007
Additional Participating Persons:	Jim Hettwer; Spokane, Washington		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).