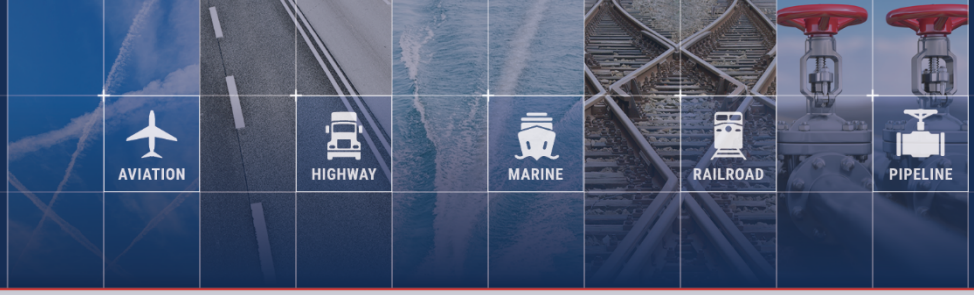

Aviation Investigation Final Report

Location:	Council, Idaho	**Accident Number:**	SEA08LA114
Date & Time:	April 26, 2008, 16:45 Local	**Registration:**	N706BC
Aircraft:	Canup Titan Tornado S	**Aircraft Damage:**	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

While climbing to cruise altitude about five minutes after departure, the outboard four inches of the tip of one propeller blade separated. The pilot was able to reduce power and return to the airport for a successful full-stop landing. Inspection of the experimental-use-only wood pusher propeller revealed that the blade had failed at a point where it had been damaged by a foreign object.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the tip of the wood propeller due to damage caused by a foreign object.

Findings

Aircraft	Propeller blade section - Damaged/degraded
Environmental issues	Debris/dirt/foreign object - Not specified

Factual Information

History of Flight

Enroute-cruise	Sys/Comp malf/fail (non-power) (Defining event)

On April 26, 2008, about 1645 mountain daylight time, an experimental Canup Titan Tornado S, N706BC, experienced the separation of a portion of its wood propeller while climbing to cruise altitude about five miles north of Council, Idaho. The private pilot, who was the sole occupant, was not injured, but the airplane sustained substantial damage to the propeller. The 14 CFR Part 91 personal pleasure flight, which departed Council, Idaho, about five minutes prior to the propeller failure, was en route to McCall, Idaho. The airplane was being operated in visual meteorological conditions. No flight plan had been filed.

According to the pilot, while climbing through about 5,500 feet mean sea level (MSL), she heard a loud bang, followed by a severe vibration of the airplane. She immediately turned back toward Council Airport, and after she was sure she had the runway made, reduced power and continued the descent to a successful full-stop landing. After shutting down and inspecting the airplane, the pilot discovered that about four inches of the tip of one propeller blade was missing, and that the other blade was cracked along almost its entire span.

Inspection of the Sensenich experimental-use-only W58DJL-50 wood pusher propeller by a Federal Aviation Administration Airworthiness Inspector revealed that the blade had failed at a point where it had been damaged by a foreign object. Further inspection revealed that at the point of failure there was a sharp-edged indentation about one-half inch long and about one-sixteenth to one-eighth inch deep.

Pilot Information

Certificate:	Private	**Age:**	43,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
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:**	September 1, 2007
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	December 1, 2006
Flight Time:	164 hours (Total, all aircraft), 34 hours (Total, this make and model), 60 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Canup	**Registration:**	N706BC
Model/Series:	Titan Tornado S	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	SO3J22COHK0453
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	November 1, 2007 Condition	**Certified Max Gross Wt.:**	1200 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	250 Hrs at time of accident	**Engine Manufacturer:**	Jabiru
ELT:	Installed, not activated	**Engine Model/Series:**	2200A
Registered Owner:	Claudia A. Delaney	**Rated Power:**	85 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Council, ID (U82)	**Type of Flight Plan Filed:**	None
Destination:	McCall, ID (MYL)	**Type of Clearance:**	None
Departure Time:	16:40 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	44.749721,-116.446945

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Robert Martinez; Federal Aviation Administration; Boise, ID
Original Publish Date:	May 28, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=67909