



Aviation Investigation Final Report

Location:	Big Delta, Alaska	Accident Number:	ANC23LA070
Date & Time:	August 24, 2023, 16:00 Local	Registration:	N151RF
Aircraft:	OLIVER ROBERT K OLIVER SERIES 6	Aircraft Damage:	Substantial
Defining Event:	Unknown or undetermined	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he was about 10 to 15 minutes from his destination when the airplane sustained a partial loss of engine power. He pulled the carburetor heat on but power was not restored. He moved the throttle control from idle to full power and the engine would only increase to about 25% with full throttle. The pilot decided to make a forced landing along a treeless mountain ridgeline. During landing, a strong gust of wind lifted the airplane's right wing and subsequently the left wing and engine impacted terrain and the airplane nosed over. The airplane sustained substantial damage to the fuselage and wings.

After the accident, control continuity was established between the cockpit and engine. Although both carburetor bowls were empty of fuel, when disconnected the fuel line had fuel drain from both sides of the disconnection, consistent with fuel being fed to the engine at the time of operation. Thumb compression was established for all four cylinders. The top spark plugs all appeared to be normal; the lower spark plugs in the two right cylinders had oil in them, as did the forward right cylinder, which contained about a cup of oil. Small amounts of water were drained from the two left cylinders. The wreckage was stored unprotected outside on a trailer buried in snow and the engine was laying on it side which would account for the oil and water found in the engine. Postaccident examination of the engine revealed no evidence of any preimpact mechanical malfunctions or failures that would have precluded normal operation.

Although weather conditions were conducive to serious carburetor icing at glide power, the pilot reported application of carburetor heat after the power loss with no effect. Accordingly, the reason for the power loss could not be determined.

Probable Cause and Findings

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

A partial loss of engine power for undetermined reasons.

Findings

Aircraft	(general) - Unknown/Not determined
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Factual Information

History of Flight

Enroute	Unknown or undetermined (Defining event)
Landing	Nose over/nose down

On August 24, 2023, about 1600 Alaska daylight time, a Kitfox Series 6 experimental airplane, N151RF, sustained substantial damage when it was involved in an accident near Delta Junction, Alaska. The pilot and passenger sustained minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot reported that he was flying around the Salcha River area and decided to fly to Charley River. About 10 to 15 minutes from his destination, the engine sustained a partial loss of power. To troubleshoot the loss of power, he pulled carburetor heat on but power was not restored. He moved the throttle control from idle to full power and the engine would only increase to about 25% with full throttle. The pilot decided to make a forced landing along a treeless mountain ridgeline. During landing, a strong gust of wind lifted the airplane’s right wing and subsequently the left wing and engine impacted terrain and the airplane nosed over. The airplane sustained substantial damage to the fuselage and wings.

The postaccident examination of the engine revealed no evidence of any preimpact mechanical malfunctions or anomalies that would have precluded normal operation. Control continuity was established between the cockpit and engine. Although both carburetor bowls were empty of fuel, when disconnected the fuel line had fuel drain from both sides of the disconnection. Thumb compression was established for all four cylinders. The top spark plugs all appeared to be normal; the lower spark plugs in the two right cylinders had oil in them, as did the forward right cylinder, which contained about a cup of oil. Small amounts of water were drained from the two left cylinders.

Pilot Information

Certificate:	Airline transport	Age:	40,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	January 24, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	April 1, 2023
Flight Time:	(Estimated) 3865 hours (Total, all aircraft), 100 hours (Total, this make and model), 1837 hours (Pilot In Command, all aircraft), 270 hours (Last 90 days, all aircraft), 73 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	OLIVER ROBERT K	Registration:	N151RF
Model/Series:	OLIVER SERIES 6	Aircraft Category:	Airplane
Year of Manufacture:	2000	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	S69912-006
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 1, 2023 Condition	Certified Max Gross Wt.:	1550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1460 Hrs at time of accident	Engine Manufacturer:	BOMBARDIER
ELT:	Installed	Engine Model/Series:	ROTAX (ALL)
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAFA	Distance from Accident Site:	
Observation Time:	15:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	Broken / 7500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.77 inches Hg	Temperature/Dew Point:	18°C / 12°C
Precipitation and Obscuration:			
Departure Point:	Delta Junction, AK (D66)	Type of Flight Plan Filed:	None
Destination:	Delta Junction, AK (D66)	Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Military operation area

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	64.102592,-145.78693

Administrative Information

Investigator In Charge (IIC):	Ward, Mark
Additional Participating Persons:	Timothy Kirkendall; FAA; Fairbanks, AK
Original Publish Date:	July 24, 2024
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=192993

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](#).