



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Camp Verde, Arizona	Accident Number:	WPR18FA228
Date & Time:	August 18, 2018, 14:08 Local	Registration:	N88HK
Aircraft:	Pietenpol Aircamper	Aircraft Damage:	Substantial
Defining Event:	Unknown or undetermined	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot and passenger departed on a local area flight. When the flight did not return a search was initiated and the wreckage was located later in the evening in hilly, uneven desert terrain. The wreckage debris field was contained within about a 10-foot radius of the main wreckage. All flight control surfaces remained attached and flight control continuity was established. The wing assembly was deformed in the middle section with the left portion of the wing pushed up and over the main spar; the right wing was pushed down. It is likely that the airplane was in an uncontrolled attitude at the time of impact with terrain.

A visual examination of the engine revealed no holes in the engine case. Postaccident examination of the engine revealed carbon buildup in the cylinder barrels and piston faces and worn spark plugs. The wooden propeller remained attached to the crankshaft and engine. There were no mechanical anomalies revealed that would have precluded normal operation.

Probable Cause and Findings

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

Loss of control for reasons that could not be determined because postaccident examination of the airframe and engine revealed no mechanical anomalies that would have precluded normal operation.

Findings

Aircraft	(general) - Not attained/maintained
Environmental issues	Mountainous/hilly terrain - Contributed to outcome

Factual Information

History of Flight

Unknown	Unknown or undetermined (Defining event)
Unknown	Collision with terr/obj (non-CFIT)

On August 18, 2018, about 1408 mountain standard time, an experimental Olsson Pietenpol Aircamper, N88HK, was substantially damaged when it was involved in an accident near Camp Verde, Arizona. The commercial pilot and pilot-rated passenger were fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

Visual meteorological conditions prevailed for the flight and no flight plan had been filed. The flight originated from Montezuma Airport (19AZ), Camp Verde, Arizona, about 1400, with a stop at Cottonwood Airport, Cottonwood, Arizona, with a return to 19AZ. The airplane impacted in a ravine surrounded by desert terrain about 2.5 miles east of 19AZ.

According to the pilot's wife, the purpose of the flight was to increase the pilot's confidence in a conventional landing gear airplane (tailwheel). The wife added that the passenger was a non-current flight instructor with experience in tailwheel airplanes.

Pilot Information

Certificate:	Commercial	Age:	68,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 3, 2017
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	(Estimated) 1421 hours (Total, all aircraft), 0 hours (Total, this make and model)		

Pilot-rated passenger Information

Certificate:	Airline transport	Age:	78,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	Yes
Medical Certification:	None None	Last FAA Medical Exam:	March 15, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Pietenpol	Registration:	N88HK
Model/Series:	Aircamper	Aircraft Category:	Airplane
Year of Manufacture:	1988	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1084
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
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:	PRC,5045 ft msl	Distance from Accident Site:	27 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	276°
Lowest Cloud Condition:	Scattered / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	10 knots / 15 knots	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.2 inches Hg	Temperature/Dew Point:	30°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Camp Verde, AZ (19AZ)	Type of Flight Plan Filed:	None
Destination:	Camp Verde, AZ (19AZ)	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	

Airport Information

Airport:	Montezuma 19AZ	Runway Surface Type:	
Airport Elevation:	3370 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	34.601112,-111.82833(est)

The airplane was found in hilly, uneven desert terrain surround by shrub brush and trees. During an on-scene investigation, the first identified point of impact was a 12-inch by 4-inch depression adjacent to the tailwheel. The debris field was contained within about a 10-foot radius of the main wreckage. The main wreckage was comprised of all major airframe components and was oriented on a magnetic heading of 78°. The wing assembly was deformed in the middle section with the left portion of the wing pushed up and over the main spar, the right wing was pushed down. The airplane remained intact; both

wood propeller blade roots remained attached to the propeller hub, which remained attached to the crankshaft and engine. The engine remained attached to the airframe. Flight control continuity was established.

Medical and Pathological Information

The Yavapai County Medical Examiner, Prescott Valley, Arizona performed an autopsy of the pilot. The pilot's cause of death was blunt force trauma.

The FAA's Forensic Sciences Laboratory performed toxicology on the pilot's tissue samples, which revealed Fexofenadine, a non-sedating antihistamine was detected in blood and urine. Ranitidine used to prevent and treat symptoms of heartburn was found in urine.

Tests and Research

Postaccident engine examination revealed carbon buildup on the cylinder barrels and piston faces, as well as worn spark plugs. There were no other mechanical anomalies that would have precluded normal operation. The airplanes' two Bendix SF4R-8 magnetos were examined, and both passed the functionality bench test.

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
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Additional Participating Persons:	Leon L Kelley; Federal Aviation Administration; Scottsdale, AZ
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Original Publish Date:	May 27, 2021	Investigation Class:	3
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Note:	The NTSB traveled to the scene of this accident.
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Investigation Docket:	https://data.nts.gov/Docket?ProjectID=98100
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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).