



National Transportation Safety Board Aviation Accident Preliminary Report

Location:	Ketchikan, AK	Accident Number:	CEN19MA141B
Date & Time:	05/13/2019, 1221 AKD	Registration:	N959PA
Aircraft:	De Havilland DHC-3	Injuries:	1 Fatal, 9 Serious, 1 Minor
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Sightseeing		

On May 13, 2019, about 1221 Alaska daylight time, a float-equipped De Havilland DHC-2 (Beaver) airplane, N952DB, and a float-equipped De Havilland DHC-3 (Turbine Otter) airplane, N959PA, collided in midair, about 7 miles northeast of Ketchikan, Alaska. The DHC-2 commercial pilot, and four passengers sustained fatal injuries. The DHC-3 airline transport pilot sustained minor injuries, nine passengers sustained serious injuries, and one passenger sustained fatal injuries. The DHC-2 was destroyed during the collision, uncontrolled descent, and impact with tree covered terrain and water. The DHC-3 sustained substantial damage during the collision and impact with the water. The DHC-2 was registered to and operated by Mountain Air Service, LLC, Ketchikan, Alaska, under the provisions of Title 14 Code of Federal Regulations (CFR) Part 135 as an on-demand sightseeing flight, and a Federal Aviation Administration flight plan was filed for the DHC-2. The DHC-3 was registered to Pantechnicon Aviation LTD, Minden, Nevada, and operated by Venture Travel, LLC, dba Taquan Air, Ketchikan, Alaska, under the provisions of Title 14 CFR Part 135 as an on-demand sightseeing flight, and company flight following procedures were in effect for the DHC-3. Visual meteorological conditions prevailed in the area at the time of the accident. Both airplanes were based at the Ketchikan Harbor Seaplane Base (5KE), and both were returning to 5KE at the time of the accident.

According to information provided by both operators, the purpose of both flights was to transport passengers to Ketchikan from the Misty Fjords National Monument area which was located about 30 nautical miles northeast of Ketchikan.

Preliminary flight track data revealed the DHC-3 was traveling southwest about 3,700 ft mean sea level (msl) and gradually descending at 126 knots (kts) when it crossed the east side of the George Inlet. The DHC-2 was traveling west/southwest about 3,350 ft msl at 107 kts when it crossed the east side of the George Inlet. The airplanes collided about 3,350 ft msl near the west side of the George Inlet, east of Mahoney Lake, and data signals were lost. See Figure 1. Flight Track.

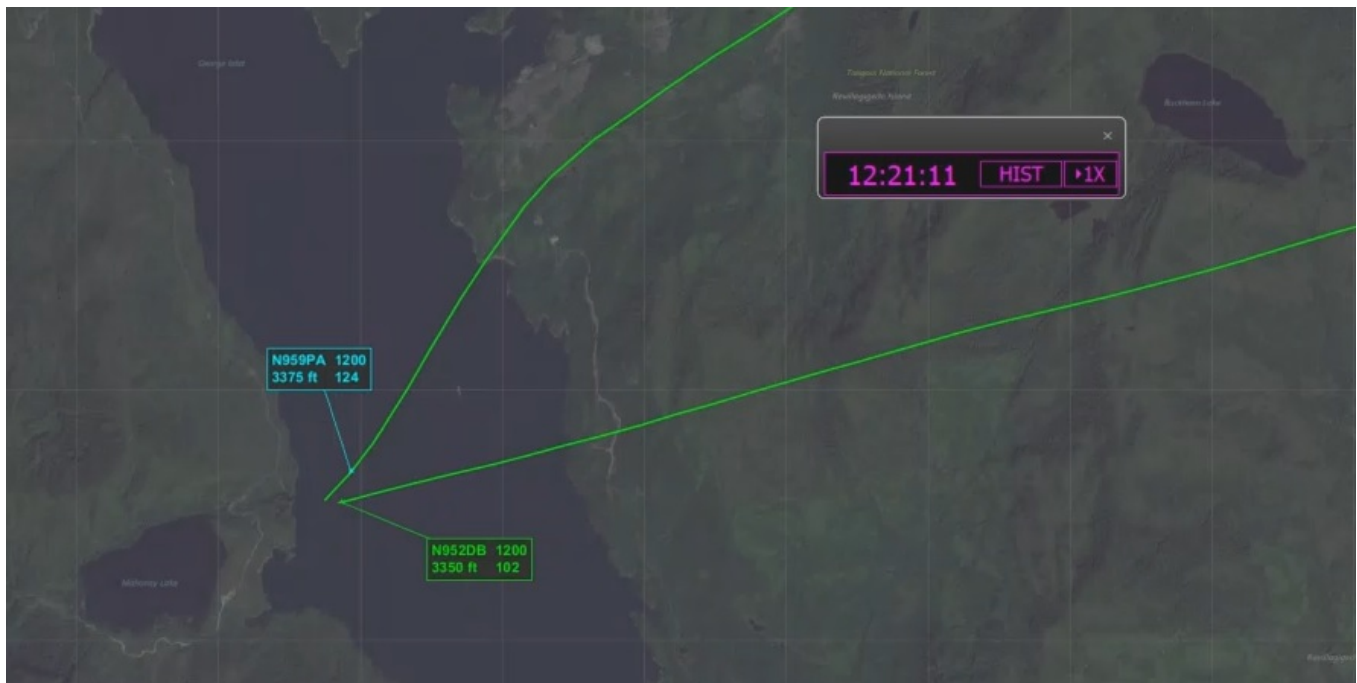


Figure 1. Flight Track

The DHC-3 pilot stated the flight from the Misty Fjords area had proceeded normally, and he had descended and was maneuvering the airplane to show passengers a waterfall near Mahoney Lake when the collision occurred. He had not observed any potential conflicting traffic on his flight display that included Automatic Dependent Surveillance-Broadcast (ADS-B) system data. He last recalled looking at his ADS-B display when he was flying over Carroll Inlet. Just prior to the collision, he saw a flash from his left side, and experienced a large, loud impact. According to the pilot, the DHC-3 airplane then rolled right and pitched about 40 degrees nose down toward the water in George Inlet. He stated that he was able to maintain some control and flare the airplane prior to impact. The pilot estimated that the airplane impacted the water about five seconds after the collision. The pilot, some passengers, and some bystanders helped the passengers of the DHC-3 evacuate the airplane and move to the shore.

The DHC-3 main wreckage came to rest about 80 ft underwater about 400 ft off the east shore of George Inlet about 1.75 miles northeast of the DHC-2 main wreckage. The DHC-3 floats were separated and found tied off by rescue personnel to a tree about 65 ft north of the main wreckage.

The DHC-2 airplane broke up in-flight after the collision, and the wreckage was scattered over water and mountainous tree-covered terrain northeast of Mahoney Lake on the west shore of George Inlet. The main wreckage included the floats, engine, firewall, instrument panel, lower fuselage structure, and right fuselage structure and was located in saltwater near the mouth of Mahoney Creek. The debris field was about 2,000 ft long by about 1,000 ft wide, and contained separated fuselage, empennage, and cabin structure.

Examination of the DHC-2 wreckage showed the right wing had several mechanical cuts from the right aileron inboard to the wing root. Each successive cut penetrated further inboard and

forward into the wing structure. Each cut had distinct downward deformation of the upper and lower wing skins, consistent with impacts from propeller blades.

Neither airplane was equipped, nor was required to be equipped, with a crashworthy flight data or cockpit voice recorder. Several avionics components and personal electronic devices were recovered from the wreckage areas. These components and devices were shipped to the National Transportation Safety Board Vehicle Recorders Laboratory, Washington, D.C. for further examination.

Aircraft and Owner/Operator Information

Aircraft Make:	De Havilland	Registration:	N959PA
Model/Series:	DHC-3	Aircraft Category:	Airplane
Amateur Built:	No		
Operator:	Venture Travel, LLC	Operating Certificate(s) Held:	On-demand Air Taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAKT, 92 ft msl	Observation Time:	1153 ADT
Distance from Accident Site:	8 Nautical Miles	Temperature/Dew Point:	16° C / 3° C
Lowest Cloud Condition:	Clear	Wind Speed/Gusts, Direction:	11 knots / 17 knots, 130°
Lowest Ceiling:	None	Visibility:	10 Miles
Altimeter Setting:	29.91 inches Hg	Type of Flight Plan Filed:	Company VFR
Departure Point:	Rudyard Bay, AK	Destination:	Ketchikan, AK

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Fatal, 9 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 9 Serious, 1 Minor	Latitude, Longitude:	55.425556, -131.505000 (est)

Administrative Information

Investigator In Charge (IIC):	Aaron M Sauer
Additional Participating Persons:	Todd Gentry; Federal Aviation Administration; Washington, DC Kevin Roof; Venture Travel, LLC; Ketchikan, AK
Note:	The NTSB traveled to the scene of this accident.