National Transportation Safety Board
Aviation Accident Final Report

Location:	Hydaburg, Alaska	**Accident Number:**	ANC18FA053
Date & Time:	July 10, 2018, 08:35 Local	**Registration:**	N3952B
Aircraft:	De Havilland DHC 3	**Aircraft Damage:**	Substantial
Defining Event:	Loss of visual reference	**Injuries:**	6 Serious, 4 Minor, 1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The airline transport pilot was conducting a commercial visual flight rules (VFR) flight transporting 10 passengers from a remote fishing lodge. According to the pilot, while in level cruise flight about 1,100 ft mean sea level (msl) and as the flight progressed into a mountain pass, visibility decreased rapidly. In an attempt to turn around and return to VFR conditions, the pilot initiated a climbing right turn. Before completing the 180° right turn, he saw what he believed to be a body of water and became momentarily disoriented, so he leveled the wings. Shortly thereafter, he realized that the airplane was approaching an area of snow-covered mountainous terrain, so he applied full power and initiated a steep climb; the airspeed decayed, and the airplane collided with an area of rocky, rising terrain, which resulted in substantial damage to the wings and fuselage.

The pilot reported no mechanical malfunctions or anomalies that would have precluded normal operation, and the examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

The weather forecast at the accident time included scattered clouds at 2,500 ft msl, overcast clouds at 5,000 ft msl with cloud tops to 14,000 ft and clouds layered above that to flight level 250, and isolated broken clouds at 2,500 ft with light rain. AIRMET advisory SIERRA for "mountains obscured in clouds/precipitation" was valid at the time of the accident. Conditions were expected to deteriorate. Passenger interviews revealed that through the course of the flight, the airplane was operating in marginal visual meteorological conditions and occasional instrument meteorological conditions (IMC) with areas of precipitation, reduced visibility, obscuration, and, at times, little to no forward visibility. Thus, based on weather reports and forecasts, and the pilot's and passengers' statements, it is likely that the flight encountered IMC as it approached mountainous terrain and that the pilot then lost situational awareness.

The airplane was equipped with a terrain awareness and warning system (TAWS); however, the alerts were inhibited at the time of the accident. Although the TAWS was required to be installed per Federal

Aviation Administration (FAA) regulations, there is no requirement for it to be used. All company pilots interviewed stated that the TAWS inhibit switch remained in the inhibit position unless a controlled flight into terrain (CFIT) escape maneuver was being accomplished. However, the check airman who last administered the accident pilot's competency check stated that the TAWS inhibit switch was never moved, even during a CFIT escape maneuver. The unwritten company policy to leave the TAWS in the inhibit mode and the failure of the pilot to move the TAWS out of the inhibit mode when weather conditions began to deteriorate were inconsistent with the goal of providing the highest level of safety. However, if the pilot had been using TAWS, due to the fact that he was operating at a lower altitude and thus would have likely received numerous nuisance alerts, the investigation could not determine the extent to which TAWS would have impacted the pilot's actions.

At the time of the accident, the director of operations (DO) for the company resided in another city and served as DO for another air carrier as well. He traveled to the company's main base of operation about once per month but was available via telephone. According to the chief pilot, he had assumed a large percentage of the DO's duties. The president of the company said that the chief pilot had taken over "officer of the deck" and "we're just basically using him [the DO] for his recordkeeping."

The FAA was aware that the company's DO was also DO for another commuter operation. FAA Flight Standards District Office management and principal operations inspectors allowed him to continue to hold those positions, although it was contrary to the guidance provided in FAA Order 8900.1.

The company's General Operations Manual (GOM) only listed the DO, the chief pilot, and the president by name as having the authority to exercise operational control. However, numerous company personnel stated that operational control could be and was routinely delegated to senior pilots. The GOM stated that the DO "routinely" delegated the duty of operational control to flight coordinators, but the flight coordinator on duty at the time of the accident stated that she did not have operational control. In addition, the investigation revealed numerous inadequate and missing operational control procedures and processes in company manuals and operations specifications.

Based on the FAA's inappropriate approval of the DO, the insufficient company onsite management, the inadequate operational control procedures, and the exercise of operational control by unapproved persons likely resulted in a lack of oversight of flight operations, inattentive and distracted management personnel, and a loss of operational control within the air carrier. However, the investigation could not determine the extent to which any changes to operational control, company management, and FAA oversight would have influenced the pilot's decision to continue the VFR flight into IMC.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to continue the visual flight rules flight into instrument meteorological conditions, which resulted in controlled flight into terrain.

Findings

Personnel issues	Decision making/judgment - Pilot
Environmental issues	Low visibility - Decision related to condition
Organizational issues	Availability of policy/proc - Operator
Organizational issues	Oversight of personnel - FAA/Regulator

Factual Information

HISTORY OF FLIGHT

On July 10, 2018, about 0835 Alaska daylight time, a float-equipped de Havilland DHC3T Otter airplane, N3952B, sustained substantial damage during impact with rocky, mountainous, rising terrain about 9 miles east of Hydaburg, Alaska. Of the 11 occupants on board, the airline transport pilot was uninjured, four passengers sustained minor injuries, and six passengers sustained serious injuries. The airplane was registered to Blue Aircraft, LLC, and was operated by Taquan Air as a Title 14 *Code of Federal Regulations* Part 135 on-demand commercial flight. Marginal visual meteorological conditions prevailed for the visual flight rules (VFR) flight, and company flight following procedures were in effect. The flight departed Steamboat Bay about 0747 destined for Ketchikan, Alaska.

The purpose of the flight was to transport guests that were staying at the Steamboat Bay Fishing Club on Noyes Island back to Ketchikan. The area between Noyes Island and Ketchikan consists of remote inland fjords, coastal waterways, and steep mountainous terrain. A review of GPS data extracted from the Chelton Integrated Display Unit (IDU) revealed that after departing Steamboat Bay the flight proceeded easterly towards the village of Klawock and to the northwest edge of Klawock Lake, prior to making about a 270° turn, it then continued on a southerly heading along the west coast of Prince of Wales Island towards Waterfall Seaplane Base (KWF) prior to turning easterly towards Hydaburg and an area known as Sulzer Portage.

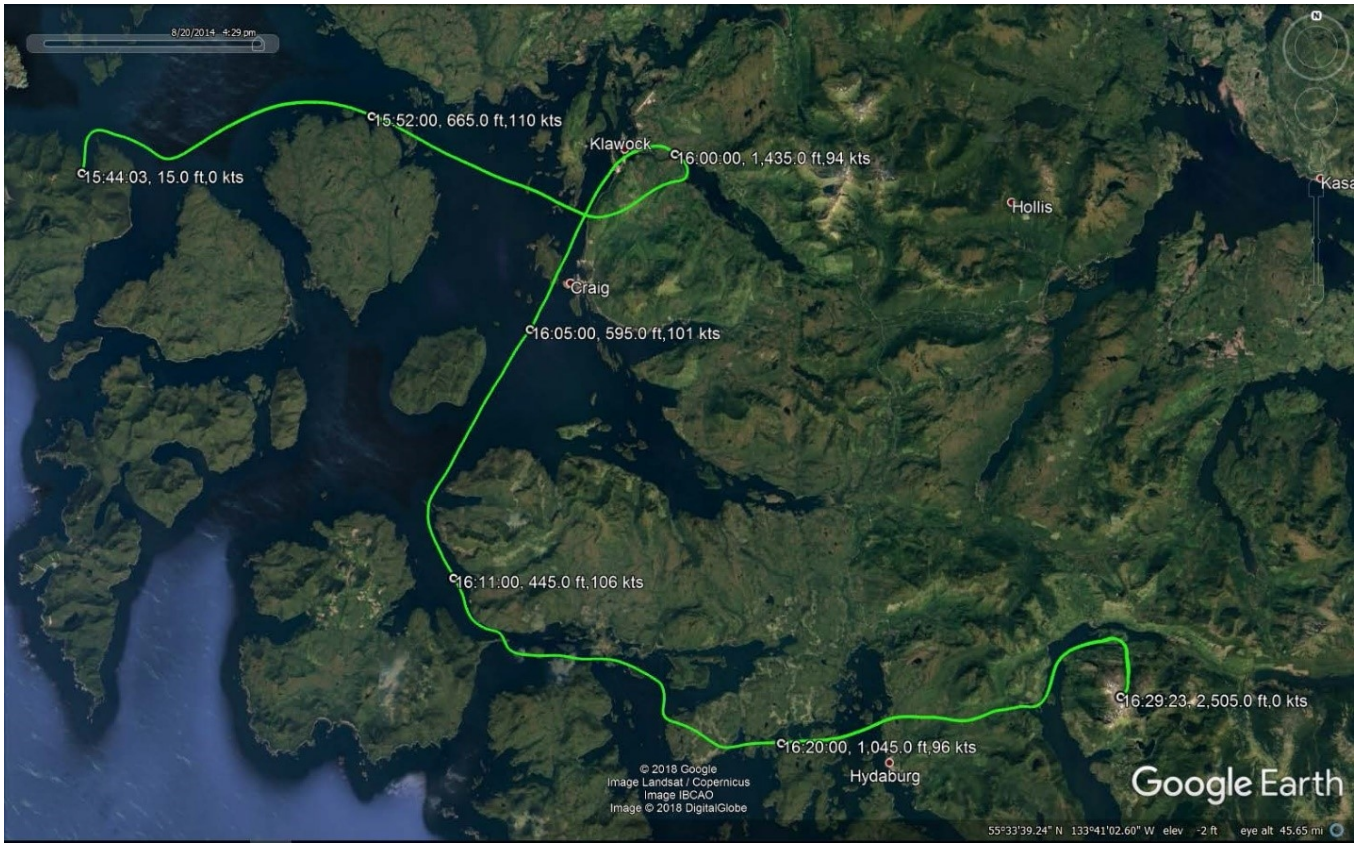

Figure 1. Google Earth overlay of the entire accident flight on July 10, 2018. Indicated airspeed (IAS) values are shown.

For further information, see the Cockpit Displays – Recorded Flight Data Factual Report located in the public docket for this investigation.

According to the pilot, while in level cruise flight about 1,100 ft mean sea level (msl) as the flight progressed into an area known as Sulzer Portage, visibility decreased rapidly in heavy rain and clouds. In an attempt to turn around and return to VFR conditions, he initiated a climbing right turn. Before completing the 180° right turn, he saw what he believed to be a body of water, and he became momentarily disoriented so he leveled the wings. Shortly thereafter, he realized that the airplane was approaching an area of snow-covered mountainous terrain, so he applied full power and initiated a steep climb to avoid the rising terrain ahead. As the climb continued, the airspeed decayed, and the airplane subsequently collided with the mountain. During the initial impact, the airplane's floats partially separated from the fuselage. The airplane wreckage came to rest in an area known as Jumbo Mountain. When asked if he remembered any issues with the airplane, he replied "…the airplane was running great."

According to the passenger seated in the right front seat, after departure, the flight proceeded to Klawock and then made what he thought was a 180° turn. He said the flight made numerous course deviations as the pilot maneuvered around weather, and, at times, all forward visibility was lost as they briefly flew in and out of the clouds. He said he became uncomfortable and was thinking it would be prudent to just land on the water. Shortly thereafter, he observed a large mountain directly in front of the airplane; knowing they could not outclimb the mountain, he presumed there must be a pass through the area. The airplane then entered a cloud and the pilot added power and pitched up, but the airplane impacted the side of the mountain.

According to a second passenger, who was seated toward the back of the airplane, the weather at Steamboat Bay when they departed was rain and low clouds. During the flight, he could occasionally see the land and water below, but sometimes he could not. He said that there was "serious fog" all around. After they passed Waterfall Resort, he became very concerned that they were headed in the wrong direction. He texted the right front seat passenger (a friend) and asked him to ask the pilot to land and wait for the weather to improve. He said that he did not see the mountain until they were right on it, and observed the pilot add power right before impact.

At 0843, the United States Coast Guard (USCG) Sector Juneau received a report from the Alaska State Troopers that a float plane had crashed near Sulzer Portage on Prince of Wales Island. Two USCG helicopters were launched, and the Alaska State Troopers dispatched five helicopters to the search area; a staging area was established near the accident site. One of the helicopter pilots stated that he was unable to search the upper levels of the mountainous area due to a low cloud ceiling and poor visibility. A "First Alert" was received from the accident airplane's onboard emergency locator transmitter (ELT) at 0911. About the same time, a 911 dispatcher in Ketchikan talked via cell phone to a passenger, who provided GPS position and elevation based on data from her iPhone. At 1047, both USCG helicopters arrived in the search area and one helicopter obtained a weak direction finding bearing from the ELT. The bearing and the survivor's description of the accident area were used to direct search assets near the accident site, so the passengers could hear the USCG helicopters. Two-way radio communications were

established between the passengers and USCG by using the accident airplane's radio. The USCG located the accident site at 1156. At 1308, all 11 survivors had been hoisted into the USCG's rescue helicopter and transferred to the staging area for transport back to Ketchikan.

PERSONNEL INFORMATION

The pilot held an airline transport pilot certificate with airplane single-engine land and sea, multi-engine land and sea, and instrument ratings. A second-class airman medical certificate was issued on December 6, 2017, and contained limitations of must wear corrective lenses.

According to the operator's training records, the pilot was hired with 26,618 total hours of flight experience, including 2,700 hours of experience in Alaska. At the time of the accident, the pilot reported that he had accumulated about 306 hours in the accident airplane make and model. His most recent airman competency check, which was administered by a company check airman, was completed on May 13, 2018.

In June 2018, the pilot was on duty for 25 days and flew about 84 hours, with 5 days off. In July 2018, the pilot was on duty for 7 days, including the day of the accident, and flew about 28 hours, with 3 days off.

AIRCRAFT INFORMATION

The de Havilland DHC-3 Otter is a single-engine, propeller-driven, single-pilot, high-wing, short-takeoff-and-landing (STOL) airplane originally designed in the early 1950s. The original airplane was powered by a single reciprocating radial engine but could be converted to turbine engine power by supplemental type certificate (STC). The accident airplane was powered by a Pratt & Whitney Canada PT6A turboprop engine in accordance with Vazar, Inc., STC SA3777NM and equipped with International Aeroproducts Model 8100 floats in accordance with Anew Sioux Enterprises, Ltd., STC SQ01825NY. The type certificate for the airplane is currently owned and maintained by Viking Air Limited, Sidney, British Columbia, Canada.

The accident airplane was equipped with two Chelton Flight Systems FlightLogic electronic flight instrument system (EFIS) Integrated Display Units (IDU). The IDUs were identical part numbers and were configured to operate as primary flight displays (PFD) or multi-function displays (MFD). Using sensors, including solid-state air data and attitude heading reference system, the PFD displayed aircraft parameter data including altitude, airspeed, attitude, vertical speed, and heading. The MFD displayed navigational information through a moving map. Additionally, the units in the accident airplane included a terrain awareness and warning system (TAWS) that provided color-coded warnings of terrain on the MFD and, when enabled, aural alerts. As part of the TAWS system, the PFD was capable of providing a profile view of terrain ahead of the aircraft (synthetic vision).

The FlightLogic EFIS IDU features integrated Class B TAWS or, optionally, Class A or C TAWS or Class A or B Helicopter TAWS (HTAWS). The IDU provides TSO-C151b TAWS functionality. Depending upon aircraft configuration settings and external sensors/switches, the system is configurable as a Class A, B or C TAWS or a Class A or B HTAWS.4. The accident airplane's TAWS functionality was set to Class B specifications as required by 14 CFR 135.154 and Technical Standard Order (TSO) – C151. 14 CFR 135.154 (b) (2) states, "No person may operate a turbine-powered airplane configured with 6 to 9 passenger seats, excluding any pilot seat, after March 29, 2005, unless that airplane is

equipped with an approved terrain awareness and warning system that meets as a minimum the requirements for Class B equipment in Technical Standard Order (TSO)-C151."

Although Class B TAWS specifies 700 ft agl during cruise flight and 500 ft during descent (as specified in TSO C-151c), the float-equipped accident airplane was authorized, per 14 *CFR* 135.203(a)(1), to cruise as low as 500 ft agl, which is below the Class B TAWS design alerting threshold. As a result, Class B TAWS auditory and flag alerts would be triggered during normal operations.

A TAWS inhibit switch, which was directly connected to the EFIS IDU, could manually inhibit the TAWS alerting function. The TAWS inhibit switch was a toggle type that provided the pilot with an obvious indication of actuation. The TAWS inhibit switch was found in the "inhibit" mode following the accident.

All of the company pilots interviewed stated that the TAWS inhibit switch remained in the inhibit position unless a controlled flight into terrain (CFIT) escape maneuver was being accomplished. However, the check airman who last administered the accident pilot's competency check in accordance with 14 *CFR* 135.293(b), when asked about enabling the TAWS switch during a CFIT escape maneuver, "No, it never gets moved."

METEOROLOGICAL INFORMATION

The closest weather reporting facility was Hydaburg Seaplane Base (PAHY), Hydaburg, Alaska, about 9 miles west of the accident site. At 0847, a METAR from PAHY reported, in part: wind from 110° at 13 knots; 5 statute miles visibility in light rain and mist; few clouds at 900 ft, overcast clouds at 1,700 ft; temperature 57°F; dew point 55°F; and altimeter setting of 30.16 inches of mercury.

An area forecast that included the forecast for the accident location and AIRMET information was issued by the AAWU at 0410 Alaska daylight time. The forecast at the accident time included scattered clouds at 2,500 ft msl, overcast clouds at 5,000 ft msl with clouds tops to 14,000 ft and clouds layered above that to FL250, isolated broken clouds at 2,500 ft with light rain. No significant turbulence was expected. Moderate in-cloud icing was forecast between 12,000 ft and FL190. The freezing level was identified at 9,000 ft. AIRMET advisory SIERRA for "mountains obscured in clouds/precipitation" was issued at 0410 Alaska daylight time and was active for the accident site at the accident time. Conditions were expected to deteriorate.

For further information, see the Meteorology Factual Report located in the public docket for this investigation.

FLIGHT RECORDERS

The accident airplane was not equipped, nor was it required to be equipped with, a cockpit voice recorder or a flight data recorder.

WRECKAGE AND IMPACT INFORMATION

The accident site was located on a rock face on the east side of Jumbo Mountain at an elevation of about 2,557 ft msl. All the airplane major components were located at the accident site.

The cockpit and fuselage were largely intact but sustained impact damage. The power lever and propeller lever were found in the full forward position and the condition lever was in the idle cutoff position. The cockpit seats remained attached and secure with lap belts and shoulder harnesses available. The fuselage seats were equipped with lap belts only.

The right wing remained attached to its respective attach points but sustained leading edge impact damage about ¾ span outboard to the tip. The right aileron remained attached to its respective attach points and sustained impact damage about midspan.

The left wing remained attached to its respective attached points but sustained leading edge impact damage about midspan. The left aileron remained attached to its respective attach points and was relatively undamaged.

The left and right horizontal stabilizers, vertical stabilizer, and rudder, along with both left and right servo tabs and the rudder trim tab remained attached to their respective attach points and were relatively undamaged. The left and right elevators remained attached to their respective attach points but sustained impact damage. The stabilizer jackscrew remained attached to its attach points and no excessive inner movement was present in the jackscrew.

The engine remained attached to the airframe and engine control continuity was established from the engine to the cockpit. The three-blade Hartzell propeller separated from the engine at the reduction gearbox. All three propeller blades remained attached to the propeller hub and exhibited broken blade tips, torsional twisting, chordwise scratching and leading-edge gouging.

All the primary flight control surfaces remained attached to their respective attachment points, and flight control continuity was verified from all the primary flight control surfaces to the cockpit.

The pilot reported no mechanical malfunctions or anomalies that would have precluded normal operation, and the examination of the airframe and engine revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation.

ORGANIZATIONAL AND MANAGEMENT INFORMATION

Taquan Air was a 14 *CFR* Part 135 air carrier that held on-demand and commuter operations specifications. The air carrier was authorized to conduct business exclusively under the business names "Venture Capital, LLC" or "Taquan Air." The company headquarters was located in Ketchikan, Alaska. The company operated 15 airplanes of which 3 were DHC-3T Turbine Otters, and employed about 25 pilots, with most working on a seasonal basis. According to the DO, Venture Capital LLC was operating four trips per day per airplane, totaling about 60 operations per day.

Director of Operations

The DO was hired as DO at Taquan in January 2016. In October 2017, he was hired as the chief pilot for Grant Aviation, a large scheduled Part 135 air carrier that also held commuter and on-demand operations specifications; he was promoted to DO at Grant Aviation in April 2018. Although this new position was based in Anchorage, Alaska, where he moved in October 2017, he continued to hold the DO position at Taquan. In addition, he was also a contract simulator instructor for Alaska Airlines.

According to numerous company personnel, the DO would visit Taquan's Ketchikan base about once a month but was available by phone, if necessary. The president of the company said that the chief pilot had taken over "officer of the deck" and "we're just basically using him [DO] for his recordkeeping, as … we need a DO."

Chief Pilot

The chief pilot was hired as chief pilot at Taquan in September 2014. Before that, he was a line pilot and company instructor at Promech Air, in Ketchikan, Alaska, from May 2010 until September 2014. He had about 16,000 total flight hours, of which about 5,000 hours were accumulated in Alaska. He resided in Ketchikan.

According to the chief pilot, due to the absence of the DO, he had assumed a large number of his responsibilities. He said both positions could be accomplished by one person during the wintertime, but it was more difficult during the summer months.

Operational Control

The Taquan General Operations Manual (GOM) does not explain the procedures used for the initiation or conduct of flight movements. The GOM did not list anyone by name as having operational control other than the DO, chief pilot, and president. The DO, chief pilot, flight coordinator, safety officer, and check airmen all stated that operational control could be and was routinely delegated to senior pilots in the absence of the chief pilot.

The GOM stated that "The Director of Operations routinely delegates the duty of Operational control to the Flight Coordinator on duty." However, the flight coordinator on duty at the time of the accident stated that she had no operational control as she was "the flight follower" (a term not defined by the GOM). She added that she did have the authority to cancel a flight for weather or profitability concerns, in addition to, arranging a flight "with concurrence with the person that's in operational control."

The president of the company described operational control as "having someone…that has the ability to check the weather." He stated that the person with operational control was there to assist the pilot and flight coordinator when trying to make a launch decision, whether for weight, pilot experience or weather concerns. When asked who had the ultimate authority for operational control, he said the DO did and added "but he's not here."

Flight Risk Assessment

The Taquan Flight Operations Manual, Operations Specifications, and Training Manual did not include mention of a risk assessment process. Details on the risk assessment process was found in a document titled "Medallion Operational Risk Management (ORM) Implementation Manual" and stated in part:

Taquan Air has provided a form to assess the total risk involved for each flight. Prior to any company flight dispatch, the risk assessment form must be filled out and include all pertinent signatures. The flight coordinator will gather information for each flight to fill out the risk assessment form. The flight coordinator and the PIC for that flight will each sign the form indicating that they are both aware of the information on the form and are equally responsible for the dispatching of that flight. In the event a flight will be made outside of normal business hours, the pilot shall gather all pertinent information, fill

out a risk assessment form, sign it, and leave it in the dispatch office. If the risk number is above 10, he/she must contact management before proceeding with the flight…

Company pilots described the flight risk assessment form as highlighting areas of potential risk and then assigning a number and then the number corresponds with certain types of actions. One pilot viewed the form as "…just a piece of paper with some ink on it" and based go/no-go decisions on his experience and research instead.

According to a flight coordinator, the form is typically filled out in its entirety by flight coordinators. According to the DO, flight coordinators complete the first section of the form, and pilots complete the "Manpower" section.

Line pilots, management, and flight coordinators all stated that the pilot has the authority to change, add, or update information to the form. While dispatch and management believed that pilots provided feedback to the assessment often, line pilots stated that while they all had the authority to make changes, none could recall an instance where they had provided feedback to the risk assessment.

CFIT Training

The CFIT training, policies, and procedures were not contained, nor were they required to be, in the FAA-accepted GOM or the FAA-approved training program. Taquan had developed, in conjunction with their Medallion Foundation, a CFIT Avoidance Training Manual; however, there was no regulatory requirement for compliance with the policies contained in the manual.

Section IV of the manual contained the following guidance for inadvertent flight into instrument meteorological conditions (IMC):

"In the advent of inadvertent flight into IMC the crewmember shall immediately initiate corrective action in the form of either a level 180 degree turn away from terrain, a level attitude descent straight ahead or when conditions will not safely allow for either of the preceding maneuvers a immediate climb straight ahead or in a holding pattern to a safe altitude that will allow for terrain clearance to be maintained, followed by a radio call to either flight service or center and request assistance for continued instrument flight until a safe let down can be accomplished, and a call to company to inform them of the situation."

During interviews, multiple pilots stated that the company CFIT escape maneuver was to complete a 180° turn, enable TAWS, descend to 300 ft and set up for a glassy water landing. The accident pilot said that after setting up for the landing, the procedure was to continue below 300ft "until you arrive at the water, or break out of the cloud, I assume." When asked if there was a different procedure for flights over land versus over water, he replied "Not really."

All of the company pilots interviewed stated that the TAWS inhibit switch remained in the inhibit position unless a controlled flight into terrain (CFIT) escape maneuver was being accomplished. However, the check airman who last administered the accident pilot's competency check in accordance with 14 *CFR* 135.293(b), when asked about enabling the TAWS switch during a CFIT escape maneuver, "No, it never gets moved."

ADDITIONAL INFORMATION

Federal Aviation Administration Oversight

The Juneau Flight Standards District Office (JNU FSDO) was assigned oversight of 102 commercial certificates at the time of the accident. The office manager stated in an interview that there were a total of 12 inspectors assigned to the JNU FSDO. Two of those 12 were principal operations inspectors (POIs); one was in JNU and the other was in Kenai. He said that the FSDO was allocated 5 POIs, but were unable to attract applicants for the position.

The POI for Taquan stated that his workload was "heavy" and he did not have time to complete all his oversight tasks. According to a work assignment letter, he was responsible for the oversight of 24 Part 135 certificates, seven Part 133 certificates and two Part 137 certificates.

Director of Operations Approval

Numerous interviews with FAA management personnel and inspectors responsible for the Grant Aviation and the Taquan air carrier certificates revealed that the FAA was made aware, on multiple occasions, that the DO for Taquan was serving as a management official for two Part 135 certificates; however, there was a belief by the FAA's inspectors and management personnel responsible for the certificates, that this was not contrary to the Federal Aviation Regulations or guidance contained in FAA Order 8900.1. In addition, little to no coordination or communication was established between the POIs responsible for the two certificates.

FAA Order 8900.1, Volume 2, Chapter 2, Section 3, 2-158D, Management Personnel Serving Multiple Certificate Holders, D, states, in part:

NOTE: Headquarters (HQ) will not approve part 135 commuter operations or part 121 operations to share part 119 management personnel, as provided for in this paragraph.

For further operations or human performance information, see the Operational Factors/Human Performance Factual Report located in the public docket for this investigation.

TAWS

Numerous Part 135 operators are authorized to conduct flights under VFR at altitudes below their respective TAWS class required terrain clearance (RTC), and the NTSB has investigated several other fatal CFIT accidents involving operations with TAWS alerts inhibited. As a result, the NTSB issued Safety Recommendation A-17-35, which asked the FAA to implement ways to provide effective TAWS protections while mitigating nuisance alerts for single-engine airplanes operated under Part 135 that frequently operate at altitudes below their respective TAWS class design alerting threshold.

History of Flight

Enroute-cruise	VFR encounter with IMC
Enroute-cruise	Loss of visual reference (Defining event)
Enroute-cruise	Controlled flight into terr/obj (CFIT)

Pilot Information

Certificate:	Airline transport	**Age:**	71,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
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:**	December 6, 2017
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	27400 hours (Total, all aircraft), 306 hours (Total, this make and model), 16770 hours (Pilot In Command, all aircraft), 135 hours (Last 90 days, all aircraft), 84 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	De Havilland	**Registration:**	N3952B
Model/Series:	DHC 3 Undesignat	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	225
Landing Gear Type:	Float	**Seats:**	11
Date/Type of Last Inspection:	July 7, 2018 AAIP	**Certified Max Gross Wt.:**	8367 lbs
Time Since Last Inspection:	10 Hrs	**Engines:**	1 Turbo prop
Airframe Total Time:	16918 Hrs as of last inspection	**Engine Manufacturer:**	Pratt & Whitney
ELT:	C126 installed, activated, aided in locating accident	**Engine Model/Series:**	PT6A-34
Registered Owner:		**Rated Power:**	750 Horsepower
Operator:		**Operating Certificate(s) Held:**	On-demand air taxi (135)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PAHY,0 ft msl	**Distance from Accident Site:**	9 Nautical Miles
Observation Time:		**Direction from Accident Site:**	90°
Lowest Cloud Condition:	Few / 900 ft AGL	**Visibility**	5 miles
Lowest Ceiling:	Overcast / 1700 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	13 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	110°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.15 inches Hg	**Temperature/Dew Point:**	14°C / 13°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Klawock, AK	**Type of Flight Plan Filed:**	Company VFR
Destination:	Ketchikan, AK	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	6 Serious, 4 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	6 Serious, 4 Minor, 1 None	**Latitude, Longitude:**	55.257499,-132.603607(est)

Administrative Information

Investigator In Charge (IIC):	Banning, David
Additional Participating Persons:	Bradfford Sipperley; Federal Aviation Administration; Fairbanks, AK Matthew Rigsby; Federal Aviation Administration; Fort Worth , TX Mike O'Conner; Taquan Air; Ketchikan, AK Leah Klinger; Taquan Air; Ketchikan, AK
Original Publish Date:	April 20, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97733