



Aviation Investigation Final Report

Location:	Port Townsend, Washington	Accident Number:	SEA06LA112
Date & Time:	June 1, 2006, 08:30 Local	Registration:	N606KA
Aircraft:	de Havilland DHC-3T	Aircraft Damage:	Substantial
Defining Event:		Injuries:	11 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Analysis

The airplane was on a company activated visual flight rules (VFR) flight plan over ocean water. The pilot said the weather conditions deteriorated with a lowering ceiling and visibility. He said that the water condition was glassy smooth with no visual definition, and this condition made it increasingly difficult to be sure he was maintaining forward visibility. He began to turn back to better VFR conditions, but conditions worsened; he believed that he inadvertently entered a fog bank. He elected to perform a precautionary landing on the water. He said that with no visual definition, he misjudged his altitude, and landed hard. The airplane's fuselage was bent/deformed, the fuselage skin was wrinkled, and the dorsal stabilizer was bent/wrinkled. At 0655, the weather conditions approximately 14 nautical miles north of the precautionary landing site were: wind calm; visibility 7 statute miles with shallow fog; cloud condition 900 feet scattered, 2,000 feet scattered, 5,000 feet broken and 20,000 feet broken; temperature 55 degrees Fahrenheit; dew point 54 degrees Fahrenheit; altimeter setting 29.95 inches. The pilot reported that at the time of the attempted landing, the visibility was zero, the wind condition was zero, and the ceiling was zero.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudgment of the airplane's height above the water during a precautionary landing which resulted in a hard landing. Contributing factors were glassy water conditions, fog, and the pilot's inadvertent VFR flight into IMC.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Findings 1. (F) WEATHER CONDITION - FOG 2. (F) VFR FLIGHT INTO IMC - INADVERTENT - PILOT IN COMMAND -----

Occurrence #2: HARD LANDING Phase of Operation: LANDING

Findings

3. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND 4. (F) TERRAIN CONDITION - WATER, GLASSY5. (C) DISTANCE/ALTITUDE - MISJUDGED - PILOT IN COMMAND

Factual Information

On June 1, 2006, at approximately 0830 Pacific daylight time, a de Havilland DHC-3T (Otter) floatplane, N606KA, was substantially damaged during a precautionary landing in the Puget Sound near Port Townsend, Washington. The airline transport pilot and his 10 passengers were not injured. The flight was being operated by Kenmore Air Harbor, Seattle, Washington, under Title 14 CFR Part 135. Instrument meteorological conditions prevailed for the ondemand air taxi, international flight which had originated approximately 20 minutes before the accident from Kenmore Air Harbor Seaplane Base (W55), Seattle, Washington. The flight was being flown on a company activated visual flight rules (VFR) flight plan with a destination of Victoria, British Columbia.

The pilot said that as he approached Port Townsend, Washington, weather conditions deteriorated with a lowering ceiling and visibility. He said that the water condition was glassy smooth with no visual definition. He said "this condition made it increasingly difficult to be sure I was maintaining forward visibility." The pilot said that he began to turn back to better VFR conditions, but conditions worsened; he believes that he inadvertently entered a fog bank. He elected to perform a precautionary landing on the water. He said that with no visual definition, he misjudged his altitude, and landed hard. He was unsure of the airplane's structural condition, so he taxied it to Port Townsend, Washington. The airplane's fuselage was bent/deformed, the fuselage skin was wrinkled, and the dorsal stabilizer was bent/wrinkled.

At 0655, the weather conditions at Whidbey Island Naval Air Station, Washington, approximately 14 nautical miles north of the precautionary landing site were: wind calm; visibility 7 statue miles with shallow fog; cloud condition 900 feet scattered, 2,000 feet scattered, 5,000 feet broken and 20,000 feet broken; temperature 55 degrees Fahrenheit; dew point 54 degrees Fahrenheit; altimeter setting 29.95 inches. The pilot reported that at the time of the attempted landing, the visibility was zero, the wind condition was zero, and the ceiling was zero.

Pilot Information

Certificate:	Airline transport; Commercial	Age:	58,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):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	October 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	26920 hours (Total, all aircraft), 5275 hours (Total, this make and model), 26420 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 75 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N606KA
Model/Series:	DHC-3T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	37
Landing Gear Type:	Float	Seats:	11
Date/Type of Last Inspection:	May 1, 2006 Annual	Certified Max Gross Wt.:	8367 lbs
Time Since Last Inspection:	65 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	10564 Hrs at time of accident	Engine Manufacturer:	Pratt & Whitney Canada
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	PT6-135
Registered Owner:	Kenmore Air Harbor, Inc.	Rated Power:	750 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	0 ft AGL	Visibility	0 miles
Lowest Ceiling:	Indefinite (V V) / 0 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	0 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	14°C / 12°C
Precipitation and Obscuration:	Moderate - None - Fog		
Departure Point:	Seattle, WA (W55)	Type of Flight Plan Filed:	VFR
Destination:	(CYWH)	Type of Clearance:	VFR
Departure Time:	08:10 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	10 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	11 None	Latitude, Longitude:	48.196945,-123.326385

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	John Davis; FAA FSDO; Seattle, WA
Original Publish Date:	January 31, 2007
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63954

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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 <u>here</u>.