



Aviation Investigation Final Report

Location:	Freeland, Washington	Accident Number:	DCA22MA193
Date & Time:	September 4, 2022, 15:09 Local	Registration:	N725TH
Aircraft:	DEHAVILLAND DHC-3	Aircraft Damage:	Destroyed
Defining Event:	Loss of control in flight	Injuries:	10 Fatal
Flight Conducted Under:	Part 135: Air taxi & commuter - Scheduled		

Probable Cause and Findings

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

The in-flight unthreading of the clamp nut from the horizontal stabilizer trim actuator barrel due to a missing lock ring, which resulted in the horizontal stabilizer moving to an extreme trailing-edge-down position rendering the airplane’s pitch uncontrollable.

Findings

Personnel issues	Knowledge of equipment - Maintenance personnel
Organizational issues	Document/info production - Manufacturer
Aircraft	Stabilizer control system - Malfunction
Personnel issues	Installation - Maintenance personnel
Organizational issues	Adequacy of policy/proc - Maintenance provider
Organizational issues	Maintenance records - Maintenance provider

Factual Information

History of Flight

Enroute	Loss of control in flight (Defining event)
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On September 4, 2022, about 1509 Pacific daylight time, a float-equipped de Havilland DHC-3 (Otter), N725TH, was destroyed when it impacted the water in Mutiny Bay, near Freeland, Washington, and sank. The pilot and nine passengers were fatally injured. The airplane was owned by Northwest Seaplanes, Inc., and operated as a Title 14 *Code of Federal Regulations* (CFR) Part 135 scheduled passenger flight by West Isle Air dba Friday Harbor Seaplanes. The flight originated at Friday Harbor Seaplane Base (W33), Friday Harbor, Washington, with an intended destination of Will Rogers Wiley Post Memorial Seaplane Base (W36), Renton, Washington. Visual meteorological conditions prevailed at the time of the accident.

Pilot Information

Certificate:	Commercial	Age:	43, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	May 31, 2022
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	July 29, 2022
Flight Time:	(Estimated) 3686 hours (Total, all aircraft), 1300 hours (Total, this make and model), 297 hours (Last 90 days, all aircraft), 111 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	DEHAVILLAND	Registration:	N725TH
Model/Series:	DHC-3	Aircraft Category:	Airplane
Year of Manufacture:	1967	Amateur Built:	
Airworthiness Certificate:	Commuter	Serial Number:	466
Landing Gear Type:	Float	Seats:	11
Date/Type of Last Inspection:	September 1, 2022 100 hour	Certified Max Gross Wt.:	8000 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	24430 Hrs as of last inspection	Engine Manufacturer:	General Electric
ELT:	C126 installed, not activated	Engine Model/Series:	H80-200
Registered Owner:	NORTHWEST SEAPLANES INC	Rated Power:	777 Horsepower
Operator:	West Isle Air	Operating Certificate(s) Held:	Commuter air carrier (135)
Operator Does Business As:	Friday Harbor Seaplanes	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KOS9	Distance from Accident Site:	10 Nautical Miles
Observation Time:	15:15 Local	Direction from Accident Site:	293°
Lowest Cloud Condition:	Few / 4000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 9000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	Unknown / Unknown
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	Unknown / Unknown
Altimeter Setting:	30.02 inches Hg	Temperature/Dew Point:	20°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Friday Harbor, WA (W33)	Type of Flight Plan Filed:	Company VFR
Destination:	Renton, WA (RNT)	Type of Clearance:	None
Departure Time:	14:50 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	9 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	10 Fatal	Latitude, Longitude:	47.99032,-122.58502

Administrative Information

Investigator In Charge (IIC):	Brazy, Douglass
Additional Participating Persons:	Matt Rigsby; FAA/AVP; Washington, DC Shane Carlson; Friday Harbor Seaplanes; Renton, WA Beverley Harvey; TSB Canada; Ottawa, OF James Lambert; Northwest Seaplanes ; Renton, WA Dennis Pollard; Viking Air Limited; Calgary, OF
Original Publish Date:	October 11, 2023
Last Revision Date:	
Investigation Class:	Class 1
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=105855

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](#).