



Aviation Investigation Final Report

Location:	ANCHORAGE, Alaska	Accident Number:	ANC99LA066
Date & Time:	May 29, 1999, 15:20 Local	Registration:	N30CC
Aircraft:	de Havilland DHC 2 MK III	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot-in-command, a certificated flight instructor, was providing turbine transition instruction to the second pilot. The accident airplane had been modified by the installation of a Pratt & Whitney PT6 turbine engine. The instructor pilot stated that the propeller governor control was causing 'the engine to surge.' He added that just prior to touchdown on runway 31, while the second pilot was manipulating the controls, the engine again surged, and the airplane landed hard. In the pilot-in-command's written report, and during a later telephone conversation, he reported that during the previous landings, the second pilot failed to 'carry power so as not to land hard again.' The first pilot said that he then instructed the second pilot as to the differences of a turbine engine vs. a piston engine. He wrote: 'I watched very closely until we were over the runway, and once again, quick as a cat, we stalled and hit hard.' The airplane's fuselage sustained substantial damage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The certificated flight instructor's inadequate supervision of the dual student. Factors associated with the accident were the student's inadvertent stall, and a surging turboshaft engine.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) STALL - INADVERTENT - DUAL STUDENT
2. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
3. (F) TURBOSHAFT ENGINE - SURGE

Factual Information

On May 29, 1999, about 1520 Alaska daylight time, an amphibious float equipped DeHavilland DHC-2 airplane, N30CC, sustained substantial damage while landing at the Lake Hood airstrip, Anchorage, Alaska. The airplane was being operated as a visual flight rules (VFR) instructional flight under Title 14, CFR Part 91, when the accident occurred. The first pilot, seated in the right seat, the second pilot, seated in the left seat, and the two passengers aboard were not injured. Visual meteorological conditions prevailed, and VFR company flight following procedures were in effect.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge on May 29, the first pilot, a certificated flight instructor, reported that he was providing turbine transition instruction to the second pilot. The accident airplane has been modified by the installation of a Pratt & Whitney PT6 turbine engine. The first pilot stated that during a previous flight that day the propeller governor control was causing "the engine to surge." The airplane returned to a maintenance facility where repairs were performed, and the airplane was returned to service. He added that about 45 minutes into the second flight, the engine again began to surge, and both pilots elected to once again return to the maintenance facility. The first pilot reported that just prior to touchdown on runway 31, while the second pilot was manipulating the controls, the engine again surged, and the airplane landed hard.

In the Pilot/Operator report (NTSB form 6120.1/2) filed by the pilot-in-command, and during a later telephone conversation, he reported that during the previous landings, the second pilot failed to "carry power so as not to land hard again." The first pilot said that he then instructed the second pilot as to the differences of a turbine engine vs. a piston engine. He wrote: "I watched very closely until we were over the runway, and once again, quick as a cat, we stalled and hit hard."

The airplane's fuselage sustained substantial damage.

Wind conditions at the time of the accident were reported to be 120 degrees at 4 knots.

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	59, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	May 7, 1998
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	24000 hours (Total, all aircraft), 1500 hours (Total, this make and model), 2300 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	de Havilland	Registration:	N30CC
Model/Series:	DHC 2 MK III DHC 2 MK I	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1566TB4
Landing Gear Type:	Amphibian	Seats:	8
Date/Type of Last Inspection:	May 28, 1999 Annual	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Turbo prop
Airframe Total Time:		Engine Manufacturer:	P&W
ELT:	Installed	Engine Model/Series:	PT6A-6A
Registered Owner:	CHARLES E. COLE	Rated Power:	550 Horsepower
Operator:	WILLIAM A. SEGO	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PAL ,73 ft msl	Distance from Accident Site:	
Observation Time:	14:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(Z41)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:20 Local	Type of Airspace:	Class D

Airport Information

Airport:	LAKE HOOD STRIP Z41	Runway Surface Type:	Gravel
Airport Elevation:	73 ft msl	Runway Surface Condition:	Wet
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	2200 ft / 70 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	61.160934,-149.989608(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	LARRY K PETERSON (FAA); ANCHORAGE , AK
Original Publish Date:	June 21, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=46529

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](#).