National Transportation Safety Board
Aviation Accident Final Report

Location:	PORT ALSWORTH, AK	**Accident Number:**	ANC99LA122
Date & Time:	08/20/1999, 1350 AKD	**Registration:**	N888KA
Aircraft:	de Havilland DHC-3T	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	4 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

The pilot told the NTSB investigator-in-charge he was attempting to takeoff from a remote lake. At the beginning of the takeoff water run, the hydraulically actuated flaps were retracted from the fully extended (takeoff) to 1/2 position. He said the airplane came up 'on step' normally, and he then attempted to pump the flaps to the fully extended position. The airplane did not become airborne, and he realized the flap selector handle was in the 'up,' not 'down,' position. The airplane struck the four feet high bank at the end of the lake, separating the floats. The pilot initially indicated he forgot to switch the flap selector handle to 'down.' He later stated he thought he had positioned it correctly, but his shirt sleeve may have snagged the handle and repositioned it.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent retraction of the trailing edge flaps during the takeoff run.

Findings

Occurrence #1: OVERRUN
Phase of Operation: TAKEOFF - ROLL/RUN

Findings
1. (C) RAISING OF FLAPS - INADVERTENT - PILOT IN COMMAND
2. LIFT-OFF - NOT ATTAINED

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - ABORTED

Findings
3. TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

Factual Information

On August 20, 1999, about 1350 Alaska daylight time, a float equipped, DeHavilland DHC-3T airplane, N888KA, sustained substantial damage when it collided with terrain at the edge of an unnamed lake about 30 miles west of Port Alsworth, Alaska, at 60 degrees 19 minutes north latitude, 155 degrees 22 minutes west longitude. The accident airplane has been modified by the installation of a Pratt & Whitney PT6-135 turbine engine. The airline transport pilot, and the three passengers on board, were not injured. The airplane was operated under 14 CFR Part 135 by Ketchum Air Service, Inc., of Anchorage, Alaska, as an on demand air taxi flight. The flight was departing the approximately 2,000 feet long lake, transporting hunters and their equipment to larger Tutna Lake, where more passengers were to be loaded for transport to Anchorage. Visual meteorological conditions prevailed at the time of the accident, and a company VFR flight plan was filed.

During a telephone interview with the NTSB investigator-in-charge (IIC) on August 22, the pilot stated that he pumped the flaps to the fully extended (takeoff) position and used the 15 knot wind to sail the airplane to the downwind end of the dogleg shaped lake. He said he then placed the hydraulic selector valve in the "up" position, pumped the flaps to the 1/2 position, and commenced the takeoff run into the wind. He described the airplane "getting on step" normally, and the headwind becoming a crosswind at the dogleg in the lake. The pilot indicated he intended to pump the flaps to the takeoff position, but because he had not switched the selector valve to the "down" position, he retracted the flaps inadvertently. The airplane did not get airborne, the pilot retarded the power lever to idle, and the airplane struck the approximately four feet high bank at the end of the lake. The floats separated from the airplane, which remained upright and slid about 100 feet across rough, but level, tundra. Both wings, horizontal stabilizers, and the underside of the fuselage sustained substantial damage. The pilot had operated the same airplane from this lake on other occasions. He indicated the airplane did not get off the water on the accident flight because the flaps were retracted instead of extended.

The pilot told the IIC during a second interview on August 25, and wrote in his NTSB Pilot/Operator report, that he thought he had placed the flap selector lever "down." He thought that due to the close proximity of the selector lever, and the pump lever, his shirt sleeve may have hooked the selector and moved it to the "up" position.

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	**Age:**	45, Male
Airplane Rating(s):	Multi-engine Land; Multi-engine Sea; Single-engine Land; Single-engine Sea	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	**Toxicology Performed:**	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	**Last Medical Exam:**	03/24/1999
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	13000 hours (Total, all aircraft), 3000 hours (Total, this make and model), 12000 hours (Pilot In Command, all aircraft), 384 hours (Last 90 days, all aircraft), 154 hours (Last 30 days, all aircraft), 11 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	de Havilland	**Registration:**	N888KA
Model/Series:	DHC-3T DHC-3T	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	106
Landing Gear Type:	Float	**Seats:**	6
Date/Type of Last Inspection:	07/24/1999, 100 Hour	**Certified Max Gross Wt.:**	8000 lbs
Time Since Last Inspection:	94 Hours	**Engines:**	1 Turbo Prop
Airframe Total Time:	3712 Hours	**Engine Manufacturer:**	P&W
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	PT6-135
Registered Owner:	KETCHUM AIRCRAFT LEASING, INC.	**Rated Power:**	750 hp
Operator:	KETCHUM AIR SERVICE, INC.	**Air Carrier Operating Certificate:**	On-demand Air Taxi (135)
Operator Does Business As:		**Operator Designator Code:**	ELRA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	, 0 ft msl	**Observation Time:**	0000
Distance from Accident Site:	0 Nautical Miles	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	**Temperature/Dew Point:**	10°C
Lowest Ceiling:	Overcast / 5000 ft agl	**Visibility**	10 Miles
Wind Speed/Gusts, Direction:	15 knots, 135°	**Visibility (RVR):**	0 ft
Altimeter Setting:		**Visibility (RVV):**	0 Miles
Precipitation and Obscuration:			
Departure Point:		**Type of Flight Plan Filed:**	Company VFR
Destination:	TUTNA LAKE, AK	**Type of Clearance:**	None
Departure Time:	1350 ADT	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	MATTHEW L THOMAS	**Adopted Date:**	06/23/2000
Additional Participating Persons:	MICHAEL HINDS (FAA FSDO); ANCHORAGE, AK		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		

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