Aviation Investigation Final Report

Location:	Anchorage, Alaska	**Accident Number:**	ANC05LA093
Date & Time:	July 1, 2005, 19:35 Local	**Registration:**	N88110
Aircraft:	Bellanca 7GCBC	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private certificated pilot was conducting a personal flight under Title 14, CFR Part 91, and was performing a glassy water takeoff toward the west from a lake in a float-equipped airplane. He reported variable winds from the north. The pilot said that during the takeoff, he lifted the left float out of the water, then the right float at 45 mph, and began a climb at 55 mph. He said that when the airplane reached about 50 feet, it began a "very fast uncommanded roll to the right, and control forces went to zero." The pilot also indicated there was no mechanical malfunction/failure, and the engine was producing power during the accident sequence. The airplane descended toward the water, and the right wing and right float assembly struck the water and the airplane overturned. The pilot and passenger were both wearing inflatable jackets, and exited the airplane. An FAA airworthiness inspector examined the airplane as it sat on a trailer, after the pilot recovered and partially disassembled the airplane. The inspector reported that the airplane's flap handle was set at 10 degrees. The inspector did not indicate that he observed any mechanical malfunction. A METAR from the accident site included calm winds, and a temperature of 72 degrees F.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed during takeoff initial climb, which resulted in a loss of control and subsequent uncontrolled descent into a lake. A factor contributing to the accident was an inadvertent stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
2. (F) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
3. TERRAIN CONDITION - WATER,GLASSY

Factual Information

On July 1, 2005, about 1935 Alaska daylight time, a float-equipped Bellanca 7GCBC airplane, N88110, sustained substantial damage when it collided with the waters of Lake Hood during initial climb after takeoff from the Lake Hood Seaplane Base, Anchorage, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight under Title 14, CFR Part 91, when the accident occurred. The airplane was operated by the pilot. The private certificated pilot, and the sole passenger, were not injured. Visual meteorological conditions prevailed. The flight was en route to Sterling, Alaska, and no flight plan was filed, nor was one required.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on July 2, the pilot reported that he was performing a glassy water takeoff from the west waterlane of Lake Hood. He indicated that he lifted off the water at 45 mph, and began a climb at 55 mph. The airplane then rolled to the right and descended toward the water. The right wing and right float assembly struck the water and the airplane overturned. The pilot and passenger were both wearing inflatable jackets, and exited the airplane. A family pet did not escape from the airplane. The pilot said the engine was producing power during the accident sequence.

A Federal Aviation Administration (FAA) operations inspector, Anchorage Flight Standards District Office (FSDO), responded to the accident scene, and reported that the airplane contained about 30 gallons of fuel. The float compartments contained additional fuel containers, an anchor, and rope. An FAA airworthiness inspector examined the airplane as it sat on a trailer on July 5, after the pilot recovered and partially disassembled the airplane. The inspector reported that the airplane's flap handle was set at 10 degrees. He did not indicate that he observed any mechanical malfunction.

In the Pilot/Operator Aviation Accident Report (NTSB FORM 6120.1) submitted by the pilot, the pilot indicated that the water surface was glassy, with a variable wind from the north. During the takeoff run, the pilot stated that he lifted the left float out of the water, then the right float, and accelerated for a climb. He said that when the airplane reached about 50 feet, it began a "very fast uncommanded roll to the right, and control forces went to zero." The pilot also indicated there was no mechanical malfunction/failure.

At 1957, an Aviation Routine Weather Report (METAR) at Lake Hood Seaplane Base was reporting, in part: Wind, calm; visibility, 10 statute miles; clouds and sky condition, few at 3,800 feet, 10,000 feet broken; temperature, 72 degrees F; dew point, 53 degrees F; altimeter, 29.71 inHg.

Pilot Information

Certificate:	Private	**Age:**	48,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	May 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	June 1, 2005
Flight Time:	1718 hours (Total, all aircraft), 304 hours (Total, this make and model), 1657 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N88110
Model/Series:	7GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	725-74
Landing Gear Type:	Float	**Seats:**	2
Date/Type of Last Inspection:	May 1, 2005 Annual	**Certified Max Gross Wt.:**	1800 lbs
Time Since Last Inspection:	25 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2050 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-320
Registered Owner:	Berchmans D. Wick	**Rated Power:**	160 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PALH,71 ft msl	**Distance from Accident Site:**	
Observation Time:	19:57 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Few / 3800 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken / 10000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.7 inches Hg	**Temperature/Dew Point:**	22°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Anchorage, AK (PALH)	**Type of Flight Plan Filed:**	None
Destination:	Sterling, AK	**Type of Clearance:**	VFR
Departure Time:	19:35 Local	**Type of Airspace:**	

Airport Information

Airport:	Lake Hood Seaplane Base PALH	**Runway Surface Type:**	Water
Airport Elevation:	71 ft msl	**Runway Surface Condition:**	Water-glassy
Runway Used:		**IFR Approach:**	None
Runway Length/Width:	4580 ft / 188 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	61.18,-149.971939

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	Michael Legler; FAA-AL-ANC FSDO 03; Anchorage, AK
Original Publish Date:	January 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61920