

Aviation Investigation Final Report

Location:	DILLINGHAM, Alask	a	Accident Number:	ANC99LA134
Date & Time:	September 6, 1999,	18:30 Local	Registration:	N5316D
Aircraft:	Cessna	180	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General avi	ation - Personal		

Analysis

The float equipped airplane was departing to the northeast on a 1,400 feet long seadrome. The pilot told the NTSB IIC that the winds were about four knots, and the water was lightly rippled. He said the fuel tanks were full, and that he could have managed his fuel load better. The estimated takeoff weight was 2,813 pounds. The maximum allowable takeoff weight was 2,820 pounds. The pilot said the airplane got 'on step' normally but did not lift off the water prior to striking the bank at the end of the lake. The Cessna 180A operator's handbook states the required water run for the takeoff conditions is 1,356 feet.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight planning. Factors associated with the accident were a short runway, and the pilot's failure to use available performance data.

Findings

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

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

Factual Information

On September 6, 1999, about 1830 Alaska daylight time, a float equipped Cessna 180 airplane, N5316D, sustained substantial damage when it did not become airborne during takeoff and collided with level terrain at the end of the Shannon's Pond seaplane base, Dillingham, Alaska. The accident occurred at 59 degrees 03.54 minutes north latitude, 158 degrees 34.63 minutes west longitude. The commercial pilot and the one passenger on board were not injured. The visual flight rules (VFR) personal flight was being conducted under 14 CFR Part 91 by the airplane's owner. The flight was departing for the Tikchik Lakes, Alaska. Visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed.

During a telephone interview with the NTSB investigator-in-charge (IIC) on September 8, and in his NTSB Pilot/Operator report, the pilot stated he water taxied to the southwest end of the 1,400 feet long by 100 feet wide, northeast-southwest water lane and began the takeoff run. He said the winds were north about four knots, and the water surface was lightly rippled. The flaps were set to 20 degrees. The pilot indicated that the airplane came up "on step" normally, but did not lift off the water before colliding with the northeast end of the lake. The airplane came to rest several hundred feet beyond the lake edge, and sustained substantial damage to several fuselage stringers aft of the rear float attachments.

The pilot stated that the airplane contained full standard fuel tanks, about 100 pounds of equipment, and that he and the passenger weigh 450 pounds combined. He stated in his Pilot/Operator report that he could have managed his fuel better. The allowable maximum takeoff weight for the airplane is 2,820 pounds. The NTSB IIC estimated the actual takeoff weight to be 2,813 pounds. The Cessna 180A pilot operating handbook states the takeoff water run on floats, at 2,820 pounds is 1,356 feet with zero knots of headwind.

Pilot Information

Certificate:	Commercial	Age:	38,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
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 Valid Medical–w/ waivers/lim	Last FAA Medical Exam:	July 8, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1300 hours (Total, all aircraft), 300 hours (Total, this make and model), 1100 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5316D
Model/Series:	180 180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	50214
Landing Gear Type:	Float	Seats:	4
Date/Type of Last Inspection:	May 20, 1999 Annual	Certified Max Gross Wt.:	2820 lbs
Time Since Last Inspection:	12 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3700 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	0-470K
Registered Owner:	JAMES LEE GERRITY	Rated Power:	230 Horsepower
Operator:		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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	Broken / 7000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SHANNONS POND , AK (0Z3)	Type of Flight Plan Filed:	None
Destination:	TIKCHIK LAKES , AK	Type of Clearance:	None
Departure Time:	18:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	SHANNONS POND 0Z3	Runway Surface Type:	Water
Airport Elevation:	80 ft msl	Runway Surface Condition:	Water-calm
Runway Used:	3	IFR Approach:	None
Runway Length/Width:	1400 ft / 100 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:	58.820194,-157.85997(est)

Administrative Information

Investigator In Charge (IIC):	Thomas, Matthew		
Additional Participating Persons:	RALPH PACK (FAA FSDO); ANCHORAGE , AK		
Original Publish Date:	August 14, 2001		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47329		

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.