



Aviation Investigation Final Report

Location:	Fairbanks, Alaska	Accident Number:	ANC23FA001
Date & Time:	October 5, 2022, 17:58 Local	Registration:	N217C
Aircraft:	Cessna A185F	Aircraft Damage:	None
Defining Event:	Nose over/nose down	Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the float-equipped airplane was departing from a pond. He aborted the first attempt and was taxiing back to attempt a second takeoff. Witnesses saw the floats almost fully submerged under the water as the airplane taxied and stated that the pitch attitude of the airplane was unusually nose-low. The pilot reduced engine power and the airplane nosed over. The airplane was not damaged; however, several hundred pounds of unsecured cargo inside the airplane shifted during the nose-over and likely resulted in the pilot’s inability to egress and his subsequent drowning.

During a postaccident examination, two unsealed holes were found under the float bumpers that would have allowed water to enter the front compartment of each float. It is likely that the front compartments in both floats filled with water and resulted in the nose-over during taxi.

Probable Cause and Findings

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

The improperly maintained floats, which allowed water to fill the front compartments and resulted in the airplane nosing over during taxi. Contributing to the fatal injury of the pilot was the improperly secured cargo, which prevented the pilot from egressing the airplane following the nose-over.

Findings

Aircraft

Wheel/ski/float - Incorrect service/maintenance

Factual Information

History of Flight

Taxi-into takeoff position	Nose over/nose down (Defining event)
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On October 05, 2022, about 1758 Alaska daylight time, a Cessna 185F, N217C, was not damaged when it was involved in an accident near Fairbanks, Alaska. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

A witness located next to the waterway stated that the pilot attempted and subsequently aborted the first takeoff. The pilot then began taxiing back to the point of the initial takeoff run. The witness stated that the engine appeared to be operating at full power during the takeoff attempt. During the taxi back following the aborted takeoff, the airplane's attitude was nose-low and the floats were almost completely submerged underwater.

Another witness on the other side of the float pond noted that the accident airplane's floats looked almost fully submerged under water as the airplane taxied. The witness said that the airplane was using more than normal power to taxi in the water and that the elevators appeared to be in the full nose-up position. He then heard the engine power decrease, saw the airplane start to nose over, heard the power increase, and then observed the airplane completely nose over into the water. When the airplane was pulled up on the shore, a witness observed four large streams of water coming out of the front of both floats.

Pilot Information

Certificate:	Private	Age:	75, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	June 13, 2019
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N217C
Model/Series:	A185F	Aircraft Category:	Airplane
Year of Manufacture:	1978	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18503558
Landing Gear Type:	Tailwheel; Float	Seats:	6
Date/Type of Last Inspection:	November 20, 2021 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5666.5 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:		Engine Model/Series:	IO 520 SERIES
Registered Owner:	On file	Rated Power:	285 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

About 95 pounds of cargo was located in the left float hatch. A total of about 838 pounds of cargo was in the airplane.

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	AFA,430 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	17:53 Local	Direction from Accident Site:	217°
Lowest Cloud Condition:	Few / 10000 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	6°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fairbanks, AK	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Unknown

Airport Information

Airport:	Chena Marina AK28	Runway Surface Type:	Water
Airport Elevation:	427 ft msl	Runway Surface Condition:	Water-calm
Runway Used:	36W	IFR Approach:	None
Runway Length/Width:	4000 ft / 200 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	64.812908,-147.92137

The airplane sustained no impact damage in the accident. All damage to the airframe was sustained during the recovery and rescue attempt of the pilot. During a postaccident examination of the floats, two unplugged holes were found under each front float bumper. The pilot's son said that when the airplane arrived in Alaska, the standard float bumpers were not

installed and a tire-type material was installed as a bumper instead. The correct smaller bumpers were installed at the time of the accident, with new-looking sealant around the bumper. 4 holes had been added to the front of each float to attach the larger, tire-type bumper; however, only the two side holes had been plugged and sealed. The two lower holes were left open. A Federal Aviation Administration inspector examined the underside of each float and found patches that did not appear to be watertight on the bottom. A witness stated that the pilot kept this airplane on the shore when it was not in use.

Survival Aspects

Unrestrained cargo in the cabin shifted forward during the event sequence and rescuers were unable to free the pilot from the cockpit. About 690 pounds of cargo had to be removed before rescuers could free the pilot from the airplane.

Administrative Information

Investigator In Charge (IIC):	Ward, Mark
Additional Participating Persons:	Dustin Hopkins; FAA; Fairbanks, AK
Original Publish Date:	October 10, 2023
Last Revision Date:	
Investigation Class:	Class 3
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=106074

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](#).