



Aviation Investigation Final Report

Location:	Northeast Carry, Maine	Accident Number:	ERA14CA021
Date & Time:	October 19, 2013, 18:30 Local	Registration:	N93037
Aircraft:	Cessna A185F	Aircraft Damage:	Substantial
Defining Event:	Loss of visual reference	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, night was approaching when he landed the seaplane on a lake and taxied to shore to find out he was at the wrong destination. The pilot began to taxi along the shore, but then decided to take off again to regain his bearings and land at his intended destination. At the time of the takeoff, night had already fallen, the moon was full, there were no clouds and lighting was flat. Surface conditions were "full glass" with no ripples, and the airplane's navigation lights and landing lights were illuminated. The pilot flew the airplane out over the lake, intending to make a 180-degree turn and land back towards a dock. During the final turn, he lost "visual height reference," and after leveling the wings, he set up for a low-sink-rate, glassy water landing. He thought the airplane was about 100 feet above the water when it was only "mere feet" above the surface, which the airplane impacted at a high speed and a high sink rate. Upon impact, the floats tore off the airplane, which then nosed over. Both occupants exited, and as they were swimming to shore, they were picked up by a boat. The pilot did not note any preexisting mechanical anomalies that would have precluded normal operation. Federal Aviation Administration publication FAA-H-023 states, "night landings in seaplanes on open water are extremely dangerous with a high possibility of damage or loss of the seaplane. A night landing should only be performed in an extreme emergency when no other options are available." It also notes that glassy water conditions can make accurate depth perception very difficult, even for experienced pilots.

Probable Cause and Findings

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

The pilot's improper decision to take off for an intended night water landing, and his subsequent loss of depth perception during that landing attempt.

Findings

Aircraft	Descent rate - Incorrect use/operation
Personnel issues	Decision making/judgment - Pilot
Personnel issues	Spatial disorientation - Pilot

Factual Information

History of Flight

Prior to flight	Preflight or dispatch event
Landing-flare/touchdown	Loss of visual reference (Defining event)
Landing-flare/touchdown	Hard landing

Pilot Information

Certificate:	Private	Age:	31
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	October 14, 2011
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	277 hours (Total, all aircraft), 109 hours (Total, this make and model), 213 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N93037
Model/Series:	A185F	Aircraft Category:	Airplane
Year of Manufacture:	1976	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18503168
Landing Gear Type:	Float	Seats:	4
Date/Type of Last Inspection:	October 9, 2012 Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5971 Hrs	Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	IO-520
Registered Owner:	COLEMAN SARAH B DBA	Rated Power:	300 Horsepower
Operator:	Thomas Coleman	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	GNR,1401 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	18:30 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	28.3 inches Hg	Temperature/Dew Point:	10°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Northeast Carry, ME	Type of Flight Plan Filed:	None
Destination:	Northeast Carry, ME	Type of Clearance:	None
Departure Time:	18:25 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	44.694328,-69.382179(est)

Administrative Information

Investigator In Charge (IIC): Cox, Paul

Additional Participating Persons:

Original Publish Date: February 13, 2014

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=88294>

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