



Aviation Investigation Final Report

Location:	League City, Texas	Accident Number:	CEN20CA348
Date & Time:	August 17, 2020, 18:00 Local	Registration:	N502BK
Aircraft:	Progressive Aerodyne Searey	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the amphibious airplane reported that he had made a landing on the lake surface and then performed a step-taxi into the wind. He then applied full power to takeoff and the airplane hit a wave from a passing boat. When the airplane struck the second wave from the boat, the front of the airplane went under water. The nose of the airplane was ripped off. With the engine still running, the airplane nosed over and filled with water.

In his report the pilot noted that he had not set the airplane's trim properly and he failed to apply back pressure on the controls when he hit the boat wake. He also noted that there were no pre-impact mechanical failures or malfunctions that would have precluded normal operation.

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 airplane control during a water takeoff after an encounter with the wake from a boat.

Findings

Personnel issues	Aircraft control - Pilot
Environmental issues	Choppy surface - Response/compensation
Environmental issues	Choppy surface - Effect on operation

Factual Information

History of Flight

Takeoff	Miscellaneous/other (Defining event)
Takeoff	Part(s) separation from AC

Pilot Information

Certificate:	Commercial; Flight instructor; Private	Age:	59, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Sport pilot Unknown	Last FAA Medical Exam:	December 13, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	January 26, 2019
Flight Time:	2591 hours (Total, all aircraft), 24 hours (Total, this make and model), 2403 hours (Pilot In Command, all aircraft), 24 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Progressive Aerodyne	Registration:	N502BK
Model/Series:	Searey No Series	Aircraft Category:	Airplane
Year of Manufacture:	2007	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1DK247
Landing Gear Type:	Retractable - Tricycle; Amphibian	Seats:	2
Date/Type of Last Inspection:	June 16, 2020 Condition	Certified Max Gross Wt.:	1370 lbs
Time Since Last Inspection:	18 Hrs	Engines:	Reciprocating
Airframe Total Time:	494 Hrs at time of accident	Engine Manufacturer:	ROTAX
ELT:	Installed, not activated	Engine Model/Series:	912ULS
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	T41	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	29°C
Precipitation and Obscuration:			
Departure Point:	League City, TX	Type of Flight Plan Filed:	None
Destination:	La Porte, TX (T41)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	29.550277,-95.042221

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Carl Thomas; Houston FSDO; Houston, TX
Original Publish Date:	February 2, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101817

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