



National Transportation Safety Board Aviation Accident Final Report

Location:	MERCER ISLAND, WA	Accident Number:	SEA01LA022
Date & Time:	12/01/2000, 1100 PST	Registration:	N8551Z
Aircraft:	Aerofab Inc. LAKE 250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

The pilot began a takeoff run to the west, planning a left step turn and liftoff to the south. Just after starting the step turn, while on the step at a speed of about 40 knots in 'a normal left turn step attitude', and 'skidding and bouncing a bit to the right through the chop as is normal in the step turn', the pilot was violently thrown to the right, striking his head on the right side door post (despite having his seat belt and shoulder harness on.) He reported that he was heading about west to southwest when this occurred. The plane came to an instantaneous stop at this point. Investigators did not find any evidence of aircraft malfunctions occurring prior to the sudden stoppage in the water.

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 aircraft control during a left turning step taxi to takeoff, resulting in a wing contacting the water during the step turn.

Findings

Occurrence #1: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: TAKEOFF

Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On December 1, 2000, approximately 1130 Pacific standard time, an Aerofab Lake 250 amphibious airplane, N8551Z, registered to and operated by the pilot, was substantially damaged in a takeoff attempt from the surface of Lake Washington near Mercer Island, Washington. The private pilot-in-command received minor injuries in the accident. Visual meteorological conditions prevailed and no flight plan was filed for the 14 CFR 91 personal flight. The pilot did not report the accident flight's destination.

The pilot indicated that at the time of the takeoff attempt, the wind was 3 to 5 knots from the south, and there was about 6 to 10 inches of chop on the water. He reported there was no nearby boat traffic and no noticeable wakes or swells. The pilot stated he began his takeoff run to the west, planning a left step turn and liftoff to the south. He reported that just after starting the step turn, while on the step at a speed of about 40 knots in "a normal left turn step attitude", and "skidding and bouncing a bit to the right through the chop as is normal in the step turn", he was violently thrown right, striking his head on the right side door post (despite having his seat belt and shoulder harness on.) He reported that he was heading about west to southwest when this occurred. He stated the plane came to an instantaneous stop at this point. The pilot subsequently radioed for assistance. Several boats came to the aid of the stricken aircraft and rescued the pilot. The aircraft then began to sink, but the aid boats were successful in placing flotation gear underneath the aircraft. This prevented the aircraft from sinking and enabled it to be towed to shore.

According to the pilot, the accident aircraft had 830 hours airframe total time since new, and the aircraft had received its last annual inspection on November 24, 2000, 1.5 flight hours before the accident. The pilot reported that after the accident, he noted that the aircraft's engine, which is mounted on a dorsal pylon above the fuselage, had toppled onto the right wing. The pilot stated that this was possibly due to a "pylon flying wire root block Uchannel [sic] failure", although he further stated that this was "most likely a result, not a cause of the accident." A representative of Talon Aviation, Puyallup, Washington, brought a fractured component he reported to be this suspect component to the NTSB Northwest Regional Office in Seattle, Washington, for examination. The NTSB IIC visually examined the component and observed that the fracture surfaces on the component displayed 45-degree shear lips. The IIC did not observe any areas of scalloping or "beach marks" on the component's fracture surfaces.

Pilot Information

Certificate:	Private	Age:	50, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/23/1999
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1328 hours (Total, all aircraft), 813 hours (Total, this make and model), 1228 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aerofab Inc.	Registration:	N8551Z
Model/Series:	LAKE 250 LAKE 250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	130
Landing Gear Type:	Retractable - Amphibian; Hull; Tricycle	Seats:	2
Date/Type of Last Inspection:	11/24/2000, Annual	Certified Max Gross Wt.:	3140 lbs
Time Since Last Inspection:	2 Hours	Engines:	1 Reciprocating
Airframe Total Time:	830 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	TIO-540-AA1AD
Registered Owner:	ROBERT J. EARLE	Rated Power:	270 hp
Operator:	ROBERT J. EARLE	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Scattered / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	40° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	UNKNOWN	Type of Clearance:	None
Departure Time:	1130 PST	Type of Airspace:	Class G

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	GREGG NESEMEIER	Report Date:	07/17/2001
Additional Participating Persons:	DAVE LEHMAN; RENTON, WA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).