



Aviation Investigation Final Report

Location:	KETCHIKAN, Alaska	Accident Number:	ANC93LA066
Date & Time:	May 19, 1993, 14:07 Local	Registration:	N8237V
Aircraft:	CESSNA 180H	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT IN COMMAND REPORTED THAT WHILE IN A CLIMBING RIGHT TURN AT 400 FEET MSL HE ENCOUNTERED A SEVERE DOWNDRAFT WHICH HE COULD NOT ARREST DESPITE THE APPLICATION OF FULL POWER. A COMMERCIAL PILOT WHO DEPARTED ALONG THE SAME ROUTE AS THE ACCIDENT FLIGHT 15 MINUTES AFTER THE OCCURRENCE REPORTED THAT THE AIR WAS STABLE AND THAT NO DOWNDRAFTS WERE ENCOUNTERED. ON THE DAY OF THE ACCIDENT, THE FLIGHT SERVICE STATION (FSS) IN KETCHIKAN DID NOT RECEIVE ANY PILOT REPORTS OF SEVERE DOWNDRAFTS IN THE KETCHIKAN BAY AREA.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT IN COMMANDS IMPROPER COMPENSATION FOR THE WIND CONDITION. A FACTOR IN THE ACCIDENT WAS THE UNFAVORABLE WIND.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) WEATHER CONDITION - UNFAVORABLE WIND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

2. (C) COMPENSATION FOR WIND CONDITIONS - IMPROPER - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

On May 19, 1993, at 1407 Alaska daylight time, a float equipped Cessna 180H, N8237V, registered to and operated by the pilot in command, crashed into Ketchikan Harbor during initial climbout from the seaplane harbor in Ketchikan. The commercial pilot and the one passenger were not injured and the airplane was destroyed. The intended destination of the 14 CFR Part 91 flight was Lake McDonald. Visual meteorological conditions prevailed at the time of the accident and no flight plan was filed.

On the morning of May 20, 1993, the pilot and passenger were interviewed separately by telephone by the NTSB investigator in charge. The pilot said that as part of his pre departure preparation, he drained the wing tanks and engine fuel sumps, conducted an engine runup and performed a flight control continuity check. Confirming that the plane was airworthy, he commenced a takeoff from the sea plane harbor on an eastbound heading. He climbed straight out at an indicated airspeed (IAS) of 80 to 85 miles per hour which provided a relative flat attitude and rate of climb of 100 to 200 feet per minute. Up to this point in the flight, the air was smooth and stable. At approximately 400 feet above the water, he initiated a 15 to 20 degree right banking turn toward Gravina Island. The pilot said that as he was in the process of rolling out of the turn the flight encountered without any prewarning a severe downdraft which he likened to the sensation of descending in an elevator. He applied full engine power, pointed the plane's nose earthward, and initiated a "hard right banking turn of 45 to 50 degrees" to parallel the islands shoreline. He glanced at the airspeed indicator and observed an IAS of 70 mph. The stall warning horn did not go off and there was no buffet indication of a stall. Just prior to contacting the water, he brought the plane's nose up to the horizon. The airplane contacted the water in a relatively flat attitude.

The passengers comments essentially paralleled those of the pilot. Both the pilot and the passenger reported that there were no problems with the engine.

A commercial pilot who departed along the same route as the accident flight approximately 15 minutes after the accident reported that the air was stable and that no down drafts were encountered. On the day of the accident the Flight Service Station (FSS) in Ketchikan did not receive any pilot reports of severe downdrafts in the Ketchikan Harbor area.

Pilot Information

Certificate:	Commercial	Age:	50, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
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:	April 28, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5000 hours (Total, all aircraft), 2100 hours (Total, this make and model), 40 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N8237V
Model/Series:	180H 180H	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18051739
Landing Gear Type:	Float	Seats:	4
Date/Type of Last Inspection:	May 22, 1992 Annual	Certified Max Gross Wt.:	2870 lbs
Time Since Last Inspection:	161 Hrs	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-470R
Registered Owner:	SHEROD, WILLIAM N.	Rated Power:	230 Horsepower
Operator:	SHEROD, WILLIAM N.	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:	KTN ,88 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:48 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	33 miles
Lowest Ceiling:	Broken / 8000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	17°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(5KE)	Type of Flight Plan Filed:	None
Destination:	LAKE MCDONALD , AK	Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	Class D

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	55.609966,-131.579498(est)

Administrative Information

Investigator In Charge (IIC):	Borson, Timothy
Additional Participating Persons:	JULIO FIGUEROA; JUNEAU , AK
Original Publish Date:	May 17, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=2341

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](#).