



Aviation Investigation Final Report

Location:	McCall, Idaho	Accident Number:	SEA03LA196
Date & Time:	September 28, 2003, 13:30 Local	Registration:	N234KC
Aircraft:	Beech T-34 (A-45)	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

Upon returning to the airport after a local flight, the pilot sequenced himself into the traffic pattern behind an Aviat Husky that was following a De Havilland Beaver. Just after he rolled out on final with his gear down and his flaps retracted for a no-flap landing, the pilot noticed that the Beaver was pulling off of the runway. He therefore continued on final at an airspeed about 10 to 15 knots above the aircraft's no-flap stall speed. As he neared the runway in calm wind conditions, the pilot concluded that the Husky, which had landed just beyond the threshold, would not be exiting the runway before he touched down. He therefore decided to execute a go-around. As he was adding full power, the aircraft encountered a disturbance most likely created by the Beaver, resulting in the left wing suddenly dropping and the aircraft losing about 50 feet of altitude. As the engine revved to full power, the pilot was able get the wings level and stop the altitude loss, but his remedial action was insufficient to fly out of the disturbance, and almost immediately thereafter the right wing dropped and the aircraft fell another 20 feet onto the terrain.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadequacy of the pilot's remedial action taken in an attempt to fly out of an encounter with the wake vortex turbulence created by a preceding aircraft while on short final to land. Factors include calm winds in the area of the final approach course, and the pilot's inadvertent encounter with wake vortex turbulence.

Findings

Occurrence #1: VORTEX TURBULENCE ENCOUNTERED

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (F) WEATHER CONDITION - OTHER
2. (F) WAKE TURBULENCE - ENCOUNTERED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: GO-AROUND (VFR)

Findings

3. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: GO-AROUND (VFR)

Findings

4. TERRAIN CONDITION - GROUND

Factual Information

On September 28, 2003, approximately 1330 mountain daylight time, a Beech T-34 (A-45) , N234KC, impacted the terrain just short of runway 34 at McCall Municipal Airport, McCall, Idaho. The private pilot and his passenger received serious injuries, and the aircraft, which is owned and operated by the pilot, sustained substantial damage. The 14 CFR Part 91 personal pleasure flight, which departed the same airport about two hours earlier, was being operated in visual meteorological conditions. No flight plan had been filed.

According to the pilot, while returning to the airport after the two hour flight, he began monitoring the common traffic advisory frequency (CTAF) when he was a little over five miles from the airport. He then sequenced himself into traffic on a left downwind for runway 34. The aircraft in front of him was an Aviat Husky that was following a De Havilland Beaver. Just after he rolled out on final with his gear down and his flaps retracted, the pilot noticed that the Beaver was pulling off of the runway. He therefore continued on final at about 70 knots for what was planned to be a no-flap full-stop landing. As he descended on final, the pilot noticed that the Husky had suddenly slowed considerably as it approached the threshold, and then ultimately touched down right at the approach end of runway 34. The pilot elected to continue his approach, but as he reached short final it appeared that the Husky would not be exiting the runway before he touched down, so he decided to execute a go-around. He therefore began to add full power, but just as he was doing so, the left wing suddenly dropped and the aircraft lost about 50 feet of altitude. As the engine revved to full power, the pilot was able to get the wings level and stop the altitude loss, but immediately thereafter the right wing dropped and the aircraft fell another 20 feet onto a gravel blast pad about 200 feet short of the runway threshold. After impacting the terrain, the aircraft slid about 300 feet, coming to rest on the runway pavement about 100 feet past the runway threshold.

According to the pilot, his airspeed was between 65 to 70 knots the last time he looked at it, which is 10 to 15 knots above the aircraft's flaps-up stall speed. Witnesses reported that the wind was essentially calm, and the pilot reported that he did not feel any evidence of a wind gust or wind shear type turbulence. The pilot further stated that he had performed hundreds of intentional stalls during his 3,800 hours in this model aircraft, and he did not feel that this event was initiated by a stall. He said that he did not feel any of the shudder or vibration normally associated with a stall, and he did not see the stall light illuminate. He further stated that it felt to him like he had entered some "freaky air," and that he may have encountered some disturbance created by the Beaver at precisely the moment he was adding power to initiate the go-around.

A post-accident inspection of the aircraft did not reveal any evidence of an engine malfunction or flight control anomaly that might have contributed to the accident sequence.

Pilot Information

Certificate:	Private	Age:	72, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
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:	July 24, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 22, 2002
Flight Time:	4200 hours (Total, all aircraft), 3800 hours (Total, this make and model), 4120 hours (Pilot In Command, all aircraft), 102 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N234KC
Model/Series:	T-34 (A-45)	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic	Serial Number:	G789
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-550-B
Registered Owner:	Kris E. Cox	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	24°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McCall, ID (MYL)	Type of Flight Plan Filed:	None
Destination:	(MYL)	Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	McCall Municipal MYL	Runway Surface Type:	Asphalt
Airport Elevation:	5021 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	6107 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Serious	Latitude, Longitude:	44.88972,-116.101387

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	Cliff Smart; Boise FSDO; Boise, ID
Original Publish Date:	March 30, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=58066

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