

Aviation Investigation Final Report

Location:	WHITING, Vermont	Accident Number:	NYC00LA012
Date & Time:	October 10, 1999, 13:00 Local	Registration:	N403AC
Aircraft:	American Champion (ACAC) 8GCBC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

After a normal takeoff roll, the airplane lifted off the ground and immediately yawed to the left. The pilot stated he was unable to correct the yawing by applying right rudder, and said the right rudder travel was 'short and stiff.' As the airplane approached the trees, he pulled the power back and attempted to land. During the landing, the airplane's right main landing gear was sheared and the right wing and fuselage were damaged. Examination of the wreckage did not reveal any pre-impact malfunctions with the airplane. Additionally, examination of the airplane's rudder system revealed that the rudder travel was in accordance with the airplane's type certificate data sheet. After the accident, the pilot stated that the passenger was 6-feet 2-inches tall, and while he did not feel the passenger pushing on the rudder pedals, it was possible that the passenger may have had his feet on the rudder pedals. Additionally, he stated he always briefed passengers about not touching the control stick; however, he did not brief passengers about the rudder pedals.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight passenger briefing, which resulted in control interference.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF Findings 1. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND 2. (C) CONTROL INTERFERENCE - PASSENGER

Occurrence #2: HARD LANDING Phase of Operation: TAKEOFF - ABORTED

Factual Information

On October 10, 1999, about 1300 Eastern Daylight Time, an American Champion 8GCBC, N403AC, was substantially damaged during an aborted takeoff from a private grass strip in Whiting, Vermont. The certificated commercial pilot and a passenger were not injured. Visual meteorological conditions prevailed and no flight plan had been filed for the local personal flight conducted under 14 CFR Part 91.

According to a Federal Aviation Administration (FAA) Inspector, the grass strip was about 1,200 feet long, by 90 feet wide, and oriented on a North/South direction. Trees were located to the south, and along both sides the runway.

In a telephone interview, the pilot stated that after a normal takeoff roll, the airplane lifted off the ground and immediately yawed to the left. The pilot stated he was unable to correct the yawing by applying right rudder, and said the right rudder travel was "short and stiff." As the airplane approached the trees, he pulled the power back and attempted to land.

During the landing, the airplane's right main landing gear was sheared. Additionally, the right wing and fuselage were damaged. The airplane came to rest on the runway.

Examination of the wreckage by an FAA Inspector did not reveal any pre-impact malfunctions with the airplane. When the rudder pedals in the cockpit were depressed, an equal amount left and right deflection was noted. Additionally, a follow up examination of the airplane's rudder system revealed that the rudder travel was in accordance with the airplane's type certificate data sheet.

In a follow-up telephone interview, the pilot stated that the passenger was 6-feet 2-inches tall, and while he did not feel the passenger pushing on the rudder pedals, it was possible that the passenger may have had his feet on the rudder pedals. Additionally, he stated he always briefed passengers about not touching the control stick; however, he did not brief passengers about the rudder pedals.

Winds reported at an airport about 35 miles north of the accident site, at 1254, were from 180 degrees at 17 knots, with 21 knot gusts; however, the pilot reported the winds at the strip were calm.

Pilot Information

Certificate:	Commercial	Age:	55,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 Medicalw/ waivers/lim	Last FAA Medical Exam:	January 16, 1998
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	ne: 2412 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	American Champion (ACAC)	Registration:	N403AC
Model/Series:	8GCBC 8GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	403-99
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	44 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	44 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-360C1F
Registered Owner:	EDWARD S. MIDGLEY	Rated Power:	180 Horsepower
Operator:		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:	BTV ,334 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	12:54 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Overcast / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	17 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	16°C / 11°C
Precipitation and Obscuration: No Obscuration; No Precipitation			
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	NONE	Runway Surface Type:	Grass/turf
Airport Elevation:	450 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	1350 ft / 250 ft	VFR Approach/Landing:	

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke		
Additional Participating Persons:	JIM EDWARDS; PORTLAND		
Original Publish Date:	Date: November 30, 2000		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47645		

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.