

Aviation Investigation Final Report

Location: Paris, Texas Accident Number: FTW01LA155

Date & Time: June 26, 2001, 16:15 Local Registration: N249SF

Aircraft: American Champion (ACAC) 8GCBC Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation

Analysis

The flight instructor was demonstrating the airplane to a prospective buyer, who claimed to have 900 hours flight time, but had not taken the private pilot checkride. During the briefing, the flight instructor told the potential buyer/passenger that he could try making the takeoff and that she "would take over if necessary." During the initial takeoff climb, the passenger pulled up excessively to a nose high attitude of approximately 60 degrees and froze on the controls. When he relinquished the controls, the flight instructor was unable to recover the aircraft. The aircraft sank at a fast rate, impacted the ground and bounced. Subsequently, the aircraft cartwheeled and came to a stop inverted on the grass about 200 feet off the runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the excessive pull up by the passenger along with the certified flight instructor's inadequate supervision leading to a loss of control during the takeoff initial climb.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) PULL-UP - EXCESSIVE - PASSENGER

2. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

3. RELINQUISHING OF CONTROL - DELAYED - PASSENGER

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - GRASS

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Factual Information

On June 26, 2001, at 1615 central daylight time, an American Champion 8GCBC tail-wheel equipped single-engine airplane, N249SF, was substantially damaged following a loss of control during takeoff initial climb from the Cox Field Airport near Paris, Texas. The airplane was registered to Gailcomm, Inc. of Plano, Texas, and operated by Nighthawk Aerial Advertising of Dallas, Texas. The flight instructor and passenger were not injured. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 demonstration flight. The flight was originating at the time of the accident.

The passenger was interested in purchasing a tail-wheel airplane and requested a demonstration flight. During the briefing for the flight, the passenger told the flight instructor that he had accumulated 900 hours of flight time, which included 20 hours of tail-wheel experience, but that he had "just not gotten around to taking a check ride." (According to FAA records, the passenger received a student pilot certificate on April 21, 1994.) During the briefing, the flight instructor described the performance to be expected from the aircraft on takeoff and told the passenger that he could try making the takeoff himself and that she "would take over if necessary."

The flight instructor reported that at the time they departed, there was approximately a 5-knot crosswind from the left. According to the instructor, the passenger failed to compensate appropriately for the crosswind during the takeoff roll, allowing the left wing to raise slightly as the aircraft began to gain control effectiveness. At this time, the aircraft began to "weathervane" toward the left, and the passenger appeared to be trying to use aileron control to "steer away" from the crosswind. The instructor reminded him to keep the wings level. As the aircraft became airborne, the instructor said that she would help him and pushed the stick to the center. The instructor recalled that the passenger briefly resisted and then allowed the control stick to center. At the time the aircraft had achieved sufficient airspeed to have a good control effectiveness, the passenger brought the control stick "nearly fully back." As the aircraft pitched up approximately 60 degrees, the instructor asked him to "Get the nose down. Push forward. Push, push, push! I have it! Let go! Let go!!" At the point that the instructor said "I have it", she was "on the control stick, pushing forward". The instructor reported that the aircraft climbed 50 to 60 feet in the air in a slight right bank and rapidly approached a stalled condition. She further reported that "pushing forward on the stick as hard as [she] could [she] was unable to overcome [the passenger's] control inputs." She stated that she pulled the power back in order to stop the aircraft "from climbing any higher" and she yelled "Stop it!!" At this point the passenger relinquished the controls, and she was able to level the wings before the first impact with terrain. The instructor stated that as the aircraft bounced about 10 feet into the air, she applied power thinking it would give her more controllability. As the right wing, which was "still more stalled than the left wing," began to drop, she removed the power. The

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aircraft sank at a fast rate impacting the grassy area on the right side of the runway with the right wing. Subsequently, the aircraft cart-wheeled and came to a stop inverted on the grass pointing south, about 200 feet off the runway with the tail of the airplane resting on the taxiway.

Examination of the airplane by the FAA inspector, who responded to the accident site, revealed that both wings and the vertical stabilizer were damaged. The left main landing gear was partially separated, and the wheel of the right main landing gear was separated.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	41,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	Glider; Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Glider	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	August 23, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	December 11, 1999
Flight Time:	3700 hours (Total, all aircraft), 130 hours (Total, this make and model), 198 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	American Champion (ACAC)	Registration:	N249SF
Model/Series:	8GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	418-2000
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	July 21, 2000 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	344.8 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-360-C1G
Registered Owner:	Gailcomm, Inc.	Rated Power:	180 Horsepower
Operator:	Nighthawk Aerial Advertising	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	PRX,547 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	16:55 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 14 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	30°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Paris, TX (PRX)	Type of Flight Plan Filed:	None
Destination:	Paris, TX (PRX)	Type of Clearance:	None
Departure Time:	16:15 Local	Type of Airspace:	Class G

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Airport Information

Airport:	Cox Field Airport PRX	Runway Surface Type:	Asphalt
Airport Elevation:	547 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	Unknown
Runway Length/Width:	6000 ft / 150 ft	VFR Approach/Landing:	Unknown

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:	33.660552,-95.540504(est)

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Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas	
Additional Participating Persons:	David Snyder; FAA FSDO; Dallas, TX	
Original Publish Date:	October 9, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:	The NTSB traveled to the scene of this accident.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52570	

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.

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