



Aviation Investigation Final Report

Location:	Frederick, Maryland	Accident Number:	NYC03LA118
Date & Time:	June 3, 2003, 12:35 Local	Registration:	N77GA
Aircraft:	American Champion (ACAC) 7GCAA	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The private pilot was executing his first landing in the airplane in an effort to obtain a tailwheel signoff. While approaching the runway, the airplane encountered a crosswind from the left. The certified flight instructor (CFI) instructed the private pilot to correct for the crosswind by adding right rudder inputs, which he did throughout landing to touchdown. After the airplane touched down, the private pilot began to over-control the airplane with the rudder. The CFI assumed the controls and added full power. The airplane climbed back into the air and the CFI tried to realign it with the runway centerline. The airplane descended back to the ground and touched down hard on the left main landing gear, shearing the landing gear assembly from the fuselage. The airplane then departed the left side of the runway, where the left wing dug into the ground. The airplane came to rest upright. Examination of the wreckage did not reveal any abnormalities with the airplane flight controls, nor did the pilots report any. The winds reported at the airport, about the time of the accident, were calm.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The certified flight instructor's improper flare and his delayed remedial action. The pilot's failure to maintain directional control is a contributing factor.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - IMPROPER - PILOT IN COMMAND
2. (F) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
3. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On June 3, 2003, at 1235 eastern daylight time, an American Champion 7GCAA, N77GA, was substantially damaged while landing at the Frederick Municipal Airport (FDK), Frederick Maryland. The certificated flight instructor (CFI) and private pilot were not injured. Visual meteorological conditions prevailed and no flight plan was filed for the local instructional flight conducted under 14 CFR Part 91.

According to the CFI, the private pilot was executing his first landing in the airplane in an effort to obtain a tailwheel signoff. While approaching runway 23, a 2,220-foot-long, 100-foot-wide, asphalt runway, the airplane encountered a crosswind from the left. The CFI instructed the private pilot to correct for the crosswind by adding right rudder inputs, which he did throughout landing to touchdown.

After the airplane touched down, the private pilot began to over-control the airplane with the rudder. The CFI assumed the controls and added full power. The airplane climbed back into the air and the CFI tried to realign it with the runway centerline. The airplane descended back to the ground and touched down hard on the left main landing gear, shearing the landing gear assembly from the fuselage. The airplane then departed the left side of the runway, where the left wing dug into the ground. The airplane came to rest upright.

Examination of the wreckage by a Federal Aviation Administration inspector did not reveal any abnormalities with the airplane flight controls, nor did the pilots report any. The inspector added that the runway was wet at the time of the accident.

The winds reported at the airport, about the time of the accident, were calm.

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight instructor; Private	Age:	46, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	December 12, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 21, 2002
Flight Time:	5611 hours (Total, all aircraft), 4 hours (Total, this make and model), 3040 hours (Pilot In Command, all aircraft)		

Pilot Information

Certificate:	Private	Age:	41, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	May 30, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	September 18, 2002
Flight Time:	146 hours (Total, all aircraft), 1 hours (Total, this make and model), 87 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	American Champion (ACAC)	Registration:	N77GA
Model/Series:	7GCAA	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	471-2003
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1213 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	105 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-B2B
Registered Owner:	American Champion Aircraft Corp.	Rated Power:	160 Horsepower
Operator:	Aircraft Owners and Pilots Association	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FDK,303 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	12:03 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown	Visibility	7 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	16°C / 14°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	Frederick, MD (FDK)	Type of Flight Plan Filed:	None
Destination:	(FDK)	Type of Clearance:	None
Departure Time:	12:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Frederick Municipal Airport FDK	Runway Surface Type:	Asphalt
Airport Elevation:	303 ft msl	Runway Surface Condition:	Wet
Runway Used:	23	IFR Approach:	None
Runway Length/Width:	5220 ft / 100 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.418334,-77.379447

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen
Additional Participating Persons:	Cooper Towers; FAA FSDO-07 ; Baltimore, MD
Original Publish Date:	June 30, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57130

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](#).