



Aviation Investigation Final Report

Location:	McKinney, Texas	Accident Number:	FTW03LA206
Date & Time:	August 23, 2003, 12:00 Local	Registration:	N8730V
Aircraft:	Bellanca 7KCAB	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The flight instructor stated that he was demonstrating a forward slip to a landing when he "flared too high," and the airplane "stalled and impacted the runway." Subsequently, the airplane nosed over, and slid 150 feet down the runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain airspeed resulting in an inadvertent stall during landing. A contributing factor was flaring too high.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) FLARE - HIGH - PILOT IN COMMAND(CFI)
2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND(CFI)
3. STALL - INADVERTENT - PILOT IN COMMAND(CFI)

Factual Information

On August 23, 2003, about 1200 central daylight time, a Bellanca 7KCAB single-engine tailwheel-equipped airplane, N8730V, registered to Four Winds Aviation, Inc., of Killeen, Texas, and operated by the pilot was substantially damaged when it impacted the runway following a loss of control while landing at Aero Country Airport (T31) near McKinney, Texas. The flight instructor and the commercial pilot receiving instruction were not injured. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 instructional local flight, which departed T31 approximately 1130.

The 5,057-hour certified flight instructor (CFI), who was providing dual instruction to a commercial pilot for tailwheel endorsement, reported in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that he was demonstrating a forward slip to a landing when he "flared too high," and the airplane "stalled and impacted the runway."

According to information received from the FAA inspector, who responded to the accident site, the left main landing gear buckled on impact, and the airplane slid on its nose 150 feet down the runway. The inspector also reported that the aileron control attach bracket was broken from the bellcrank at the lower center fuselage, the propeller struck the runway, and the horizontal seat straps were broken on the rear seat.

At the time of the accident, the pilot reported clear skies, and the wind as light and variable. With a temperature of 33 degrees Celsius, field elevation of 792 feet, and an altimeter setting of 30.05 inches of Mercury, the investigator-in-charge (IIC) calculated the density altitude to be 3,468 feet.

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight instructor	Age:	41, Male
Airplane Rating(s):	Single-engine land; 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 single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical—no waivers/lim.	Last FAA Medical Exam:	May 30, 2002
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	December 7, 2001
Flight Time:	5057 hours (Total, all aircraft), 85 hours (Total, this make and model), 4950 hours (Pilot In Command, all aircraft)		

Student pilot Information

Certificate:	Commercial	Age:	45, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical—w/ waivers/lim	Last FAA Medical Exam:	April 4, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 12, 2003
Flight Time:	499 hours (Total, all aircraft), 9 hours (Total, this make and model), 399 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N8730V
Model/Series:	7KCAB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	526-75
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 2, 2003 Annual	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	8 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2808 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	AEIO-320-E2B
Registered Owner:	On file	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	TKI,585 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	11:53 Local	Direction from Accident Site:	100°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	37°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	McKinney, TX (T31)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:30 Local	Type of Airspace:	Class C

Airport Information

Airport:	Aero Country T31	Runway Surface Type:	Asphalt;Grass/turf
Airport Elevation:	792 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	4305 ft / 40 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	33.208332,-96.741943

Administrative Information

Investigator In Charge (IIC):	McGill, C Frank
Additional Participating Persons:	Barry G Proctor; Federal Aviation Administration; Dallas, TX
Original Publish Date:	March 2, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57798

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](#).