Aviation Investigation Final Report

Location:	Krum, Texas	**Accident Number:**	DFW06LA209
Date & Time:	September 7, 2006, 13:00 Local	**Registration:**	N50340
Aircraft:	Bellanca 7GCBC	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The 1,800-hour flight instructor and the 4,500-hour airline transport pilot (ATP), who was an FAA inspector, were practicing takeoffs and landings in a tail-wheel equipped single-engine airplane, when the airplane's left and right wing struts collided with a T-bar and wood fence post during an aborted landing. The ATP rented the airplane for the purpose of recurrency training under the provisions of the FAA's 4040.9D Flight Management Program. Prior to the flight, the inspector noted that the left brake pedal had excessive travel, but the instructor stated that there had not been any problems reported with the brakes. The inspector and instructor then flew to a private airport to practice takeoffs and landings on a 3,501-foot-long and 250-foot-wide turf runway. The inspector had never flown into this airport before. While on the first approach to landing, the inspector noted large birds on the runway so he executed a go-around and the birds dispersed. On the next approach to landing, he noted that the birds had returned to the runway. The flight instructor suggested that the inspector land beyond where the birds were located, which was about half-way down the runway. The inspector said he maintained an approach speed of 85 miles per hour (mph), which he later admitted was about 30 mph too fast. When the airplane touched down on the runway, he realized that it sloped downhill and he would not have enough runway length to stop. Plus, the left brake was not working properly, so he aborted the landing. The inspector added full power and began to climb; however, the right wing strut collided with a metal T-bar and a wooded fence post, which were obstructed by bushes. The pilot was able to maintain directional control of the airplane, but elected to return to the private airport and land. Examination of the airplane revealed the left and right wing struts were both damaged; however, the wood spar in the right wing was split about 2 to 3-inches. The ATP later reported that the airplane would have needed at least 2,000 feet of runway length to safely stop the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The CFI's and ATP's inflight decision to land halfway down the runway and the ATP's delayed decision to abort the landing. A factor was the ATP's excessive airspeed on final.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: LANDING - ABORTED

Findings
1. OBJECT - FENCE POST
2. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND(CFI)
3. OBJECT - POLE
4. (F) AIRSPEED - EXCESSIVE
5. (C) ABORTED LANDING - DELAYED

Factual Information

On September 7, 2006, at 1300 central daylight time, a single-engine Bellanca 7GCBC (Citabria) tailwheel-equipped airplane, N50340, sustained substantial damage when it collided with a metal T-bar and wood fence post during an aborted landing at the Air Cowboy Airport (TE58), near Krum, Texas. The flight instructor and the airline transport pilot receiving instruction were not injured. The airplane was registered to a private corporation and operated by Marcair, Incorporated, of Roanoke, Texas. No flight plan was filed for the training flight that originated from the Northwest Regional Airport (52F), near Roanoke, Texas, about 1230. Visual meteorological conditions prevailed for the local flight that was conducted under 14 Code of Federal Regulations Part 91.

The 1,800-hour flight instructor and the 4,500-hour airline transport pilot (ATP), who was an FAA inspector, were practicing takeoffs and landings in the tailwheel-equipped airplane, when the airplane's left and right wing struts collided with a T-bar and wood fence post during an aborted landing. The ATP had not flown a conventional gear airplane in over 2 years and he rented the airplane for the purpose of recurrency training under the provisions of the FAA's 4040.9D Flight Management Program.

Prior to the flight, the ATP noted that the left brake pedal had excessive travel; however, the flight instructor stated that there had not been any problems reported with the brakes. The ATP and the instructor proceeded to fly to a private airport to practice takeoffs and landings on a 3,501-foot-long, by 250-foot-wide turf runway. The ATP reported that he had never flown into this airport before.

While on the first landing approach, the ATP noted large birds on the runway, so he elected to execute a go-around and the birds dispersed. On the next landing approach, he noted that the birds had returned to the runway. The flight instructor suggested that the ATP land beyond where the birds were located, which was about half-way down the runway. The ATP stated that he maintained an approach speed of 85 miles per hour (mph) as directed by the instructor (normal approach speed is 55 mph). When the airplane touched down on the runway, the ATP realized that the runway sloped downhill and he would not have enough runway remaining to stop the airplane. Additionally, the left brake was not working properly, so he elected to abort the landing. The inspector added full power to abort the landing and the airplane began to climb; however, the right wing strut collided with a metal T-bar and a wooded fence post, which were obstructed by bushes at the departure end of the runway. The ATP was able to maintain directional control of the airplane, but elected to return to the private airport and land. The ATP later stated that he would have needed approximately 2,000 feet of runway to safely land the airplane at the suggested airspeed.

The flight instructor, who also owned Marcair, Inc., provided a similar account of the accident

sequence except that he told the ATP than an airspeed between 65 and 80 mph was "good" in the traffic pattern. He also stated that the ATP made a normal landing and there was plenty of runway remaining to stop safely, and he was not sure why the ATP elected to abort the landing. In addition, the flight instructor reported that he had not actually been hired as a flight instructor and was only a passenger on the flight. He knew the ATP was already checked-out in the airplane, and was not aware that he needed instruction or that he was not current in the airplane. The instructor added that FAA personnel had previously asked his employees to join them on flights, and he thought that this was one of those instances.

Both pilots agreed that there was no discussion prior to the flight regarding aircraft performance nor was there any discussion about who was pilot-in-command for the flight.

In an interview with the flight school's dispatcher, she confirmed that the ATP had contacted the flight school several days prior to the accident. She stated that the ATP wanted to rent an airplane and hire a flight instructor. The ATP specifically requested the owner of the flight school to be his instructor. The flight was entered into the school's electronic scheduler program as "w/[flight instructor] (needs 1.5 checkout)", and a confirmation e-mail was automatically sent to the ATP. The dispatcher also contacted the flight instructor and informed him that he had been scheduled for this instructional flight.

An FAA inspector from another Flight Standards District Office (FSDO) examined the airplane at the accident site and later at the operator's maintenance facility. According to the inspector, the right wing (wooden) spar was split about 2 to 3-inches, and the front and aft wing struts on both wings were bent. In addition, the wheel pants, the right horizontal stabilizer and the propeller sustained damage.

Weather at the time of the accident was reported by the instructor as wind from 090 degrees at 10 knots, visibility more than 10 miles, and clear skies.

Flight instructor Information

Certificate:	Commercial; Flight instructor; Private	**Age:**	49,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	**Last FAA Medical Exam:**	April 1, 2006
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	August 1, 2006
Flight Time:	1800 hours (Total, all aircraft), 100 hours (Total, this make and model), 20 hours (Last 90 days, all aircraft)		

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor; Private	**Age:**	46,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Front
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 1 Without waivers/limitations	**Last FAA Medical Exam:**	April 1, 2006
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 1, 2006
Flight Time:	4500 hours (Total, all aircraft), 15 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N50340
Model/Series:	7GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Aerobatic; Normal	**Serial Number:**	1074-79
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	June 1, 2006 100 hour	**Certified Max Gross Wt.:**	1650 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2296 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	0-320
Registered Owner:	New Epic Aviation LLC	**Rated Power:**	150 Horsepower
Operator:	MarcAir	**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**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	90°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.04 inches Hg	**Temperature/Dew Point:**	29°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Roanoke, TX (52F)	**Type of Flight Plan Filed:**	None
Destination:	Air Cowboy , TX (TE58)	**Type of Clearance:**	None
Departure Time:	12:00 Local	**Type of Airspace:**	

Airport Information

Airport:	Air Cowboy Airport TE58	**Runway Surface Type:**	Grass/turf
Airport Elevation:	960 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	35	**IFR Approach:**	None
Runway Length/Width:	3501 ft / 250 ft	**VFR Approach/Landing:**	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:**	33.30389,-97.339721

Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	Darren P Pittacora; FAA/FSDO; Dallas, TX
Original Publish Date:	March 26, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64497