Aviation Investigation Final Report

Location:	Sikeston, Missouri	**Accident Number:**	CHI03LA302
Date & Time:	September 6, 2003, 10:00 Local	**Registration:**	N19CK
Aircraft:	Bellanca 8GCBC	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation		

Analysis

The airplane nosed over during the landing rollout. The pilot reported he flew an uneventful traffic pattern until touchdown. The pilot stated, "As soon as the main gear touched the ground the wheels immediately dug in as if they were not turning... ." The pilot continued to say "The [airplane] immediately went to a very tail high attitude. I pulled the stick all the way back, but the [airplane] was already too tail high to recover. The prop struck the ground and then the [airplane] flipped upside down... ." The pilot stated he inspected the airplane subsequent to the accident and confirmed the parking brake was completely disengaged. The airplane had landed to the north and the touchdown point was approximately 300 feet down the runway. There were two parallel brake skid marks beginning near the touchdown point, which continued down the runway for approximately 150 feet. There were 13 propeller-strike markings beginning approximately 100 feet from the touchdown point. The wreckage was located approximately 200 feet from the touchdown point. The main landing gear and the associated wheels, tires, rotors, brake calipers, and brake pads were inspected. No anomalies were found with the inspected items; all components were in a serviceable condition. The brake system functioned as designed when the brake pedals were depressed and released.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent activation of the brake system during touchdown and his inadequate remedial action, which resulted in the airplane nosing over.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings
1. (C) BRAKES(NORMAL) - INADVERTENT ACTIVATION - PILOT IN COMMAND
2. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On September 6, 2003, at 1000 central daylight time, a Bellanca 8GCBC, N19CK, piloted by a private pilot, sustained substantial damage when it nosed over while landing on a private airstrip (2,500 feet by 75 feet, packed gravel and grass) near Sikeston, Missouri. Visual meteorological conditions prevailed at the time of the accident. The flight was operating under the provisions of 14 CFR Part 91 without a flight plan. The pilot sustained minor injuries. The flight originated from Sikeston Memorial Municipal Airport (SIK), Sikeston, Missouri, at 0950.

According to the pilot's written statement, prior to landing he had flown over the airstrip and noticed the winds were light from the north. The pilot reported he flew an uneventful traffic pattern until touchdown. The pilot stated, "As soon as the main gear touched the ground the wheels immediately dug in as if they were not turning... ." The pilot continued to say "The [airplane] immediately went to a very tail high attitude. I pulled the stick all the way back, but the [airplane] was already too tail high to recover. The prop struck the ground and then the [airplane] flipped upside down... ."

The pilot stated he inspected the airplane subsequent to the accident and confirmed the parking brake was completely disengaged. The pilot reported both wheels rotated freely.

Inspectors with the Federal Aviation Administration (FAA) performed an on-scene investigation. The inspectors reported the airplane had landed to the north and the touchdown point was approximately 300 feet down the runway. There were two parallel brake skid marks beginning near the touchdown point, which continued down the runway for approximately 150 feet. There were 13 propeller-strike markings beginning approximately 100 feet from the touchdown point. The wreckage was located approximately 200 feet from the touchdown point.

The inspectors, along with the owner of the airplane, inspected the main landing gear and the associated wheels, tires, rotors, brake calipers, and brake pads. No anomalies were found with the inspected items; all components were in a serviceable condition. The brake system functioned as designed when the brake pedals were depressed and released.

Pilot Information

Certificate:	Private	**Age:**	19,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	July 29, 2003
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 12, 2003
Flight Time:	125 hours (Total, all aircraft), 71 hours (Total, this make and model), 94 hours (Pilot In Command, all aircraft), 54 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N19CK
Model/Series:	8GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	280-78
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	August 1, 2003 Annual	**Certified Max Gross Wt.:**	2150 lbs
Time Since Last Inspection:	17.7 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1572.09 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-360-C1A
Registered Owner:	McGarity Flying Service, LLC.	**Rated Power:**	180 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	CGI,336 ft msl	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	09:53 Local	**Direction from Accident Site:**	360°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	30°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.14 inches Hg	**Temperature/Dew Point:**	21°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sikeston, MO (SIK)	**Type of Flight Plan Filed:**	None
Destination:	Sikeston (PVT)	**Type of Clearance:**	None
Departure Time:	09:50 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Private Airstrip PVT	**Runway Surface Type:**	Grass/turf;Gravel
Airport Elevation:	210 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	36	**IFR Approach:**	None
Runway Length/Width:	2500 ft / 75 ft	**VFR Approach/Landing:**	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	36.898887,-89.561668

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Tom Russell; Federal Aviation Administration - St. Louis FSDO; St. Ann, MO
Original Publish Date:	March 2, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57901