



Aviation Investigation Final Report

Location:	ST.CHARLES, Missouri	Accident Number:	MKC86LA076
Date & Time:	March 30, 1986, 13:00 Local	Registration:	N5055G
Aircraft:	BELLANCA 7GCBC	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PIC WAS NERVOUSLY CONCERNED ABOUT AN ACFT THAT WAS CLOSE BEHIND HIM IN THE TRAFFIC PATTERN. THE PIC LANDED FAST ON THE RWY AND THE RIGHT MAIN GEAR AXLE BROKE. THE GEAR LEG DUG INTO THE RWY AND THE ACFT VEERED OFF THE LEFT SIDE INTO THE SOFT TERRAIN WHICH GROUND LOOPED THE ACFT AND DAMAGED THE WING. THE PIC STATED HE ALSO ENCOUNTERED A SHIFT IN WINDS DURING THE LANDING AND TOUCHDOWN. AN INSPECTION OF THE ACCIDENT SITE REVEALED A TIRE SKIDMARK ON THE RWY PRIOR TO THE RIGHT MAIN GEAR AXLE BREAKING FREE FROM THE LANDING GEAR. THE RECORDED WINDS WERE FM 240 DEGREES AT 6 KNOTS. NO EVIDENCE OF PREEXISTING CRACKING OF THE AXLE WAS DISCOVERED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,AXLE - OVERLOAD
2. (C) PROPER DESCENT RATE - EXCESSIVE - PILOT IN COMMAND

3. SELF-INDUCED PRESSURE - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

4. (F) TERRAIN CONDITION - SOFT

5. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	25, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 31, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	109 hours (Total, all aircraft), 21 hours (Total, this make and model), 67 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELLANCA	Registration:	N5055G
Model/Series:	7GCBC 7GCBC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1135-79
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 12, 1986 100 hour	Certified Max Gross Wt.:	1650 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2092 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320-A2B
Registered Owner:	FELTS BRADSHAW AIRCRAFT INC	Rated Power:	150 Horsepower
Operator:	ST. CHARLES FLYING SERV.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	STL ,605 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	12:45 Local	Direction from Accident Site:	130°
Lowest Cloud Condition:	Scattered / 4500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ST. CHARLES , MO (3SQ)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	12:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	ST. CHARLES 3SQ	Runway Surface Type:	Asphalt
Airport Elevation:	450 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	3500 ft / 50 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.789573,-90.510032(est)

Administrative Information

Investigator In Charge (IIC): Thorpe, Clint

Additional Participating Persons: BOB SKILES; ST. LOUIS , MO

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=34152>

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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](#).