



Aviation Investigation Final Report

Location:	WICHITA, Kansas	Accident Number:	CHI99LA019
Date & Time:	October 31, 1998, 19:23 Local	Registration:	N310PB
Aircraft:	Cessna 310R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	6 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot received reported winds of 050 to 070 degrees at 21 knots gusting to 28 knots during the approach. He reported that he '...evaluated the crosswind and determined that it was much less than expected.' At an altitude of 20 to 25 feet above the runway, the airplane '...abruptly dropped...resulting in a high bounce, another hard touchdown, with resulting bounce.' On the third touchdown the airplane remained on the runway where it groundlooped coming to rest off the runway. Maximum demonstrated crosswind component for the Cessna 310R is 19 knots. Given conditions would have produced a 16 to 26 knot crosswind.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for the wind conditions and the inadequate recovery from the bounced landing which resulted in a loss of control and the ground loop. Factors associated with the accident were the pilot's misjudging the winds conditions and the gusty crosswind.

Findings

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

Findings

1. (F) WEATHER CONDITION - CROSSWIND

2. (F) WEATHER CONDITION - GUSTS
 3. (F) WEATHER EVALUATION - MISJUDGED - PILOT IN COMMAND
 4. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
-

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. TERRAIN CONDITION - RUNWAY
 6. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
 7. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
-

Occurrence #3: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: OTHER

Findings

8. GROUND LOOP/SWERVE

Factual Information

On October 31, 1998, at 1923 central standard time, a Cessna 310R, N310PB, operated by a private pilot collided with the terrain following a loss of control while landing on runway 36 (6,100' x 100') at the Jabara Airport, Wichita, Kansas. The pilot and five passengers were not injured. The airplane was substantially damaged. The 14 CFR Part 91 personal flight was operating in visual meteorological conditions on an IFR flight plan. The flight originated from Lincoln, Nebraska, at 1800 cst.

The pilot reported that during the approach he received the automated weather broadcast which was reporting the wind to be from 050 to 070 degrees at 21 knots gusting to 28 knots. He continued to report that during the landing approach "...evaluated the crosswind and determined that it was much less than expected. In addition, I did not experience the turbulence one would anticipate with reported conditions."

The pilot reported that at an altitude of 20 to 25 feet above the runway, the airplane "...abruptly dropped...resulting in a high bounce, another hard touchdown, with resulting bounce." He reported that on the third touchdown the airplane remained on the ground, but it was pointed in a northeasterly direction. He stated the airplane groundlooped and came to rest on a northerly heading off the side of the runway.

According to the Cessna 310R Pilot's Operating Handbook, the Maximum Demonstrated Crosswind Velocity is 19 knots. Using the crosswind component chart in the same handbook and the wind condition reported to the pilot, the wind component perpendicular to the runway would have varied between approximately 16 and 26 knots.

Pilot Information

Certificate:	Private	Age:	46, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 7, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	874 hours (Total, all aircraft), 516 hours (Total, this make and model), 874 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N310PB
Model/Series:	310R 310R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	310R0656
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	March 1, 1998 Annual	Certified Max Gross Wt.:	5680 lbs
Time Since Last Inspection:	78 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3182 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-M
Registered Owner:	MICHAEL P. BROWN	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Night/bright
Observation Facility, Elevation:	AAO ,1420 ft msl	Distance from Accident Site:	
Observation Time:	18:54 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 600 ft AGL	Visibility	3 miles
Lowest Ceiling:	Broken / 2200 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	23 knots / 28 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LINCOLN , NE (LNK)	Type of Flight Plan Filed:	IFR
Destination:	(AAO)	Type of Clearance:	IFR
Departure Time:	18:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	JABARA 3KM	Runway Surface Type:	Concrete
Airport Elevation:	1420 ft msl	Runway Surface Condition:	Wet
Runway Used:	36	IFR Approach:	VOR
Runway Length/Width:	6100 ft / 100 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	37.679992,-97.340766(est)

Administrative Information

Investigator In Charge (IIC):	Sullivan, Pamela
Additional Participating Persons:	WEBSTER D MCKINLEY; WICHITA , KS
Original Publish Date:	February 15, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=45184

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](#).