



National Transportation Safety Board Aviation Accident Final Report

Location:	Osage Beach, MO	Accident Number:	CHI02LA012
Date & Time:	10/25/2001, 1538 CDT	Registration:	N200RW
Aircraft:	Beech 200	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

The Beech 200 was substantially damaged during an aborted landing. The winds were gusting in excess of the airplane's maximum demonstrated crosswind component. A witness reported finding landing gear strut pieces on the runway after the Beech 200's landing attempt. The flight then aborted the landing and continued on to its originating airport where the airplane veered off the runway and damaged airport property during its landing.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The inadequate planning/decision and the exceeded crosswind component by the pilot. The gusts were a contributing factor.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - GUSTS
2. (C) PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. LANDING GEAR - OVERLOAD
4. (C) CROSSWIND COMPONENT - EXCEEDED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: EMERGENCY LANDING

Factual Information

On October 25, 2001, at 1538 central daylight time, a Beech 200, N200RW, piloted by an airline transport pilot, received substantial damage during an aborted landing on runway 21 (6,497 feet by 100 feet, asphalt) at the Lee C. Fine Memorial Airport (AIZ), Osage Beach, Missouri. The pilot aborted the landing and returned to the Spirit of St. Louis Airport (SUS), St. Louis, Missouri, from which the flight originated. Upon landing at SUS on runway 26R (3,800 feet by 75 feet, asphalt), the airplane veered off the runway, impacted a visual approach slope indicator, crossed taxiway echo, and stopped short of several T-hangars located on the north ramp. The 14 CFR Part 91 business flight was operating on an instrument rules flight plan. The pilot was uninjured. The flight originated from SUS and was en route to AIZ prior to the accident.

The pilot reported in a written statement, "...I departed Spirit 14:45 and arrived at Lee C. Fine approximately 15:15. I was listening to the AWOS coming in, so I picked runway 21. I went out for a long final because of the winds. I also turned the right radio up to be sure I hear the reports. As I came down final, the reports were mostly 270/15, with some variation and gusts. As I touched down, I heard a kind of rattling sound. My reaction was to pull up and add take-off power. I was going to go around for another approach, but when I tried to raise the gear, I knew I had troubles. The left main gear would not come up. I headed for Spirit and contacted maintenance and the Spirit Tower. I was in the air over Spirit for about half an hour using up fuel and letting the emergency vehicles get in place. While I was in the air over Spirit, I tried to shake the gear down to no avail. I did shake some drawers out and lost power on the flaps, but I did manage to get the fuel off before touch down."

A witness, located on a ramp parallel to runway 21 at AIZ, reported in a written statement, "At approximately 3:30-3:45 pm on 10-25-01 I observed a King Air 200 attempt to land on [runway] 21 at Lee C. Fine Memorial Airport. It was extremely windy, with [gusts] up to 25 knots. As the aircraft touched down I noticed a large amount of smoke from the tires. The aircraft then appeared to settle toward the left wing. The aircraft [then] aborted the landing and then took back off. As he climbed out it appeared that the nose and [right] main gear retracted normally. The left gear appeared to remain down. The aircraft then made a left turn and headed east. Shortly thereafter a Pilatus also attempted to land and aborted the approach. He then attempted a second approach and aborted. At that time thinking the King Air may have blown a tire, I checked the runway and found the strut pieces. I then contacted Columbia flight services."

The maximum demonstrated crosswind is defined in The Design of the Airplane, by Darrol Stinton, as "The velocity of the crosswind component for which adequate control of the aeroplane during take-off and landing was actually demonstrated during certification tests." The maximum demonstrated crosswind component for the King Air 200 is 25 KIAS.

The AIZ automated weather observing system recorded the following:

At 1515, winds from 290 degrees at 17 knots gusting to 27 knots.

At 1535, winds from 300 degrees at 13 knots gusting to 31 knots.

At 1555, winds from 290 degrees at 14 knots gusting to 27 knots.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	61, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/09/2001
Occupational Pilot:		Last Flight Review or Equivalent:	04/11/2001
Flight Time:	19213 hours (Total, all aircraft), 13242 hours (Total, this make and model), 18840 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N200RW
Model/Series:	200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	BB242
Landing Gear Type:	Retractable - Tricycle	Seats:	12
Date/Type of Last Inspection:	04/23/2001, Continuous Airworthiness	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	93.5 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	11416.2 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6-41
Registered Owner:	200 RW Incorporated	Rated Power:	850 hp
Operator:	Williams Patent Crusher & Pulverizer Company	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AIZ, 869 ft msl	Distance from Accident Site:	
Observation Time:	1535 CDT	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots / 31 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	295°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	13° C / -4° C
Precipitation and Obscuration:			
Departure Point:	St. Louis, MO (SUS)	Type of Flight Plan Filed:	Unknown
Destination:	Osage Beach, MO (AIZ)	Type of Clearance:	Unknown
Departure Time:	1445 CDT	Type of Airspace:	Class G

Airport Information

Airport:	Lee C. Fine Memorial (AIZ)	Runway Surface Type:	Asphalt
Airport Elevation:	869 ft	Runway Surface Condition:	Unknown
Runway Used:	21	IFR Approach:	Unknown
Runway Length/Width:	6497 ft / 100 ft	VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Report Date:	07/02/2002
Additional Participating Persons:	Lemont L Wison; Federal Aviation Administration; Saint Louis, MO		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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