



National Transportation Safety Board Aviation Accident Final Report

Location:	URBANA, IL	Accident Number:	CHI00LA126
Date & Time:	04/29/2000, 1315 CDT	Registration:	N3482
Aircraft:	Beech UC-45J	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot said he performed three-point touchdown, landing to the east on a grass airstrip. He said, '... as we landed, the tail wanted to come up, so I pulled the stick all the way back and held it back ... while I was reaching to lift the flaps off.' The pilot said that before he got the flaps retracted, he noticed the tail was coming up again. He ensured that the power was off and his feet were off the brakes. 'The airplane came up on its nose. We were almost stopped before we flipped on our back over the nose.' The pilot said that when he later returned to the airplane, he noticed the 'T-handle brake lever was 3/4 engaged.' Examination of the airplane revealed heavy longitudinally running grass rubbing on both tires. The brake discs were free and the wheels rotated freely. An examination of the field showed a pair of parallel-running tire marks moving toward the north side of the landing strip, and 11 succeeding slashes in the ground running perpendicular to the parallel tire tracks on the airplane's left side. An examination of the remaining airplane systems revealed no anomalies. Wind conditions, reported 14 minutes after the accident, were 010 degrees at 7 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot not maintaining directional control on the ground and the abrupt brake application during the landing roll.

Findings

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

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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

Findings

2. (C) BRAKES(NORMAL) - ABRUPT - PILOT IN COMMAND
3. LANDING GEAR,PARKING BRAKE - ENGAGED

Factual Information

On April 29, 2000, at 1315 central daylight time (cdt), a Beech UC-45J, N3482, operated by a commercial pilot, sustained substantial damage during landing to the east, on a grass airstrip, east-northeast of Champaign, Illinois, when the airplane lost directional control and nosed over. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR part 91. No flight plan was on file. The pilot and two passengers on board the airplane reported no injuries. The local flight originated at Rantoul, Illinois, at 1245 cdt.

In his written statement, the pilot said that prior to landing he did a normal pre-landing "GUMPS" check. The pilot said that he did a three-point touchdown to the Day Aero Place landing strip (2,200 feet by 100 feet, dry grass). He said, "... as we landed, the tail wanted to come up, so I pulled the stick all the way back and held it back ... while I was reaching to lift the flaps off." The pilot said that before he got the flaps retracted, he noticed the tail was coming up again. He ensured that the power was off and his feet were off the brakes. "The airplane came up on its nose. "We were almost stopped before we flipped on our back over the nose." The pilot said that when he later returned to the airplane, he noticed the "T-handle brake lever was 3/4 engaged."

The passenger/owner on board the airplane said that shortly after touchdown, the airplane started to swerve right, then left. The airplane then went "full nose forward, skidded on [its] nose a short distance, and then fell over on its back."

A witness, positioned approximately 1,300 feet west-northwest of the airfield, said he saw the airplane touch down on its main gear within the first couple hundred feet of runway, and proceed to roll out as the tail started to settle. "Before the tail reached the ground, the airplane made a little wiggle and appeared to be heading towards the north side of the runway. At that time the tail started up and seemed to hesitate for a split second, and then [the airplane] went almost straight up on its nose and over on its back."

A Federal Aviation Administration inspector examined the airplane on the airstrip. The airplane was found resting on its back with its nose facing west, approximately 500 feet down the airstrip. A pair of parallel-running tire marks preceded the airplane by approximately 150 feet. The tire marks began in the center of the airstrip and gradually moved toward the north edge of the airstrip until reaching a point approximately 10 feet in front of the nose of the airplane, where they stopped. Eleven succeeding slashes in the ground, running perpendicular to the parallel tire tracks, preceded the airplane on the airplane's left side. A visual inspection of the airplane showed the nose of the airplane crushed aft. The cockpit and top of the airplane were crushed inward. The cockpit windows were broken out. The tops of both radial engine cowlings were crushed inward. The left wing leading edge at the tip was crushed downward. The left horizontal stabilizer was bent downward at the root. The tops of both outboard vertical stabilizers and rudders were crushed inward. One blade on both the left and right propellers were bent aft. Both blades showed chordwise scratches. Both of the airplane's landing gear showed that the brake discs were free and the wheels rotated freely. Both tires showed heavy longitudinally-running grass rubbing on the treads. Flight control continuity was confirmed. An examination of the airplane's engines, engine controls, and other airplane systems revealed no anomalies.

At 1329 cdt, the weather reporting station at the University of Illinois-Willard Airport, 8

nautical miles from the accident site at 244 degrees magnetic heading, reported 10 miles visibility, temperature 62 degrees F, dew point 44 degrees F, winds 010 degrees at 7 knots, and an altimeter of 30.13 inches of Mercury.

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	03/05/2000
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1800 hours (Total, all aircraft), 700 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N3482
Model/Series:	UC-45J UC-45J	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	029659
Landing Gear Type:	Retractable - Tailwheel	Seats:	7
Date/Type of Last Inspection:	02/23/2000, Annual	Certified Max Gross Wt.:	8630 lbs
Time Since Last Inspection:	8 Hours	Engines:	2 Reciprocating
Airframe Total Time:	8 Hours	Engine Manufacturer:	P&W
ELT:		Engine Model/Series:	R985AN-14-B
Registered Owner:	BRUTLAG AVIATION, LTD.	Rated Power:	450 lbs
Operator:	BRUTLAG AVIATION, LTD.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CMI, 754 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1329 CDT	Direction from Accident Site:	244°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	17° C / 7° C
Precipitation and Obscuration:			
Departure Point:	RANTOUL, IL (2I5)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1245 CDT	Type of Airspace:	Class C

Airport Information

Airport:	DAY AERO PLACE AIRPORT (6IS0)	Runway Surface Type:	Grass/turf
Airport Elevation:	750 ft	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	None
Runway Length/Width:	2200 ft / 100 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	DAVID C BOWLING	Report Date:	04/20/2001
Additional Participating Persons:	BILL COOLEY; SPRINGFIELD, IL		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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