



National Transportation Safety Board Aviation Accident Final Report

Location:	STAR, NC	Accident Number:	MIA99LA040
Date & Time:	12/02/1998, 1400 EST	Registration:	N4789V
Aircraft:	Bellanca 17-30	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that he performed a short field approach, had completed his flare with his main wheels on the runway when, upon lowering the nose wheel to the runway the airplane veered off the left side. The excursion continued into the grass for about 100 feet until collision with trees. Examination of the runway by an FAA Inspector revealed that tire skid marks showed at least three separate touchdowns, and that the first touchdown was with the nose wheel only. Postcrash examination of the airplane revealed no mechanical malfunctions that would cause directional control difficulties.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the pilot to use proper short-field landing procedure, resulting in an extended flare and touchdown by the nose wheel and right main wheel simultaneously, and the subsequent loss of directional control and collision with trees.

Findings

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

Findings

1. (C) SHORT FIELD LANDING/PROCEDURE - IMPROPER - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

2. OBJECT - TREE(S)

Factual Information

On December 2, 1998, about 1400 eastern standard time, a Bellanca 17-30 Super Viking, N4789V, registered to Carolina Investigative Services, Inc., operating as a 14 CFR Part 91 personal flight, crashed on landing at Montgomery County Airport, Star, North Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The airplane was substantially damaged, and the private-rated pilot, the sole occupant, was not injured. The flight originated from Johnston County Airport, Smithfield, North Carolina, about 1340.

The pilot stated that he made a steep, short field approach at about 105 mph onto the runway, described as having trees on each end. He stated his landing touchdown felt normal with the nosewheel lined up on the centerline of runway 20, until he eased the nosewheel to the runway, at which time the airplane took a sudden and violent veer to the left, and off the runway, into a tree line. He also stated that when he hit the trees, he was doing about 90 mph. The collision sheared both wings and collapsed the nose landing gear strut. The pilot stated "no" to the question of any mechanical malfunction, and he stated that winds were not a factor in the accident.

Examination of the airplane by the pilot's personal A&P mechanic and the airport manager revealed no mechanical malfunctions of the rudder pedals, the braking system, the nose gear steering system, or any components of the nose landing gear. The rudder control path was checked for obstructions to full travel that may have interfered with the nose gear steering movement, but nothing was found.

Examination of the accident site and the airplane by an FAA inspector revealed that a single skid mark made by the nosewheel began about 1,000 feet down the 3,500-foot runway, about 2 feet left of centerline. About 71 feet further down the runway, both main wheels left a skid mark. About 58 feet further, the left main and the nosewheel left a simultaneous skid mark. About 64 feet further, another nosewheel and right main wheel simultaneous skid mark began and continued in a left turn for about 60 to 80 feet until departing the left runway edge at about a 40-degree angle to the runway. The excursion continued for about 100 feet until the airplane collided with trees. The collision sheared both wings from the airframe and forced the nose landing gear back up into its wheel well. The airplane's path up to the trees indicated all landing gear were down, all three tires were tracking straight with no wobble or shimmy, and all three tires were inflated. The path showed no plowing or uprooting of the grass or terrain.

Pilot Information

Certificate:	Student	Age:	40, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
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:	09/25/1997
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	101 hours (Total, all aircraft), 80 hours (Total, this make and model), 28 hours (Pilot In Command, all aircraft), 43 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	Registration:	N4789V
Model/Series:	17-30 17-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	30079
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	07/01/1998, Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	33 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2578 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-D
Registered Owner:	CAROLINA INVESTIGATIVE SVC., I	Rated Power:	300 hp
Operator:	ROBERT E. HILL	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SOP, 461 ft msl	Distance from Accident Site:	21 Nautical Miles
Observation Time:	1355 EST	Direction from Accident Site:	120°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23° C / 3° C
Precipitation and Obscuration:			
Departure Point:	SMITHFIELD, NC (JNX)	Type of Flight Plan Filed:	None
Destination:	(43A)	Type of Clearance:	None
Departure Time:	1330 EST	Type of Airspace:	Class G

Airport Information

Airport:	MONTGOMERY COUNTY (43A)	Runway Surface Type:	Asphalt
Airport Elevation:	628 ft	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	3500 ft / 60 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):	ALAN C STONE	Report Date:	02/16/2001
Additional Participating Persons:	LEON MC RAY; CHARLOTTE, NC		
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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