

Aviation Investigation Final Report

Location:	FORK UNION, Virgi	nia	Accident Number:	NYC01LA008
Date & Time:	October 10, 2000, 1	4:00 Local	Registration :	N68HW
Aircraft:	Beech	BE-23-B24R	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General av	iation - Personal		

Analysis

The airplane touched down on its main landing gear prior to a dirt road that crossed the runway, followed by the nose gear touching down about 18 feet farther. The pilot felt the nose gear fail and attempted to keep the nose of the airplane off the ground. The airplane then veered to the right, impacted a tree and came to rest in a wooded area. A Federal Aviation Administration Inspector examined fractured pieces of the nose wheel assembly, which were found on the ground prior to the dirt road that crossed the runway. The inspector did not observe any beach marks, fracture lines, corrosion, or progressive scoring on the fracture surfaces. The inspector added that the fracture surfaces were "clean, typical of overload failure." The inspector additionally stated that the runway had a down-sloping crown on both ends of the runway. The pilot did not report any previous problems with the nose gear and that the turf was in good condition. The pilot additionally stated that, while flaring, "when you drop the nose, the runway is higher than normal."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate flare which resulted in a hard landing. A factor related to the accident was the uneven landing area condition.

Findings

Occurrence #1: HARD LANDING Phase of Operation: LANDING - FLARE/TOUCHDOWN Findings 1. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION - UNEVEN 2. (C) FLARE - INADEQUATE - PILOT IN COMMAND

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

Findings 3. OBJECT - TREE(S)

Factual Information

On October 10, 2000, about 1400 Eastern Daylight Time, a Beech BE-23-B24R, N68HW, was substantially damaged while landing at the F.U.M.A. Airport, Fork Union, Virginia. The certificated private pilot and passenger were not injured. Visual meteorological conditions prevailed and no flight plan was filed for the personal flight conducted under 14 CFR Part 91.

According to the pilot, he was landing on Runway 34, a 3,575-foot long, 100 foot wide, grass strip. He stated that, while flaring, "when you drop the nose, the runway is higher than normal." The airplane touched down on its main landing gear prior to a dirt road that crossed the runway, followed by the nose gear touching down about 18 feet farther. The pilot felt the nose gear fail and attempted to keep the nose of the airplane off the ground. The airplane then veered to the right, impacted a tree and came to rest in a wooded area.

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The pilot did not report any previous problems with the nose gear and that the turf was in good condition. The pilot said he had landed the airplane on grass strips "many times" in the past.

The winds reported at a nearby airport were from 290 degrees at 5 knots.

Pilot Information			
Certificate:	Private	Age:	64,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	June 2, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	865 hours (Total, all aircraft), 800 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N68HW
Model/Series:	BE-23-B24R BE-23-B24R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	MC-404
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	September 15, 2000 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3711 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1B6
Registered Owner:	GEORGE R. SCHELL	Rated Power:	200 Horsepower
Operator:		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:	CHO ,641 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	330°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	17°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	NORFOLK , VA (ORF)	Type of Flight Plan Filed:	None
Destination:	(VA36)	Type of Clearance:	None
Departure Time:	11:15 Local	Type of Airspace:	Class G

Airport Information

Airport:	F.U.M.A. AIRPORT VA36	Runway Surface Type:	Grass/turf
Airport Elevation:	400 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	3575 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	37.760269,-78.259437(est)

Administrative Information

Investigator In Charge (IIC):	Demko, Stephen		
Additional Participating Persons:	JOHN A WAGER; RICHMOND , VA		
Original Publish Date:	July 17, 2001		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50433		

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 <u>here</u>.