



# Aviation Investigation Final Report

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<b>Location:</b>	JACKSONVILLE, Florida	<b>Accident Number:</b>	ATL99LA057
<b>Date &amp; Time:</b>	March 20, 1999, 20:00 Local	<b>Registration:</b>	N3621Q
<b>Aircraft:</b>	Beech 23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

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## Analysis

The solo cross-country flight was planned with a refueling stop in Jacksonville. The student pilot reported that the departure runway surface at the departure airport was rough and uneven. Upon arriving in the Jacksonville area, the student pilot was cleared for an approach to and a landing on runway 07. The student pilot stated that during the first landing he heard a cracking or popping sound. The student pilot described the touchdown as normal. At this point he elected to go-around for another approach and landing. The pilot was cleared for another landing on runway 07, and as soon as the airplane touched down on the runway surface, it veered to the right. The airplane rotated 180 degrees in the center of the runway. The post-accident examination of the airplane disclosed that the nose gear attach point had failed. The visual examination of the fracture surface revealed typical overload deformation. Prior to this occurrence, no mechanical problems with the airplane were reported by the pilot. Reportedly, during the wreckage examination, a small amount of corrosion was also discovered on the nose gear attach point.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE OVERLOAD FAILURE OF THE LANDING GEAR ATTACH POINTS DURING TAKEOFF FROM A TURF AIRSTRIP. FACTORS ARE ROUGH AND UNEVEN TERRAIN.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. (F) TERRAIN CONDITION - ROUGH/UNEVEN
2. (C) LANDING GEAR,NOSE GEAR ATTACH POINT - OVERLOAD
3. LANDING GEAR,NOSE GEAR ATTACH POINT - CORRODED
4. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

### Findings

5. GROUND LOOP/SWERVE

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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

### Findings

6. OBJECT - TREE(S)

## Factual Information

On March 20, 1999, at 2000 eastern standard time, a Beech 23, N3621Q, ground looped during a full stop landing at the Jacksonville International Airport in Jacksonville, Florida. The instructional flight was operated by the student pilot under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage and the student pilot was not injured. The flight departed Cumming, Georgia, at 1630.

According to the student pilot, the solo-cross country flight was planned with a refueling stop in Jacksonville. The student pilot reported that the departure runway surface at Cumming Airport was rough and uneven. Upon arriving in the Jacksonville area, the student pilot was cleared for an approach to and a landing on runway 07. The student pilot stated that during the first landing he heard a cracking or popping sound. The student pilot described the touchdown as normal. At this point he elected to go-around for another approach and landing. The pilot was cleared for another landing on runway 07, and as soon as the airplane touched down on the runway surface, it veered to the right. The airplane rotated 180 degrees in the center of the runway.

The post-accident examination of the airplane disclosed that the nose gear attach point had failed. The visual examination of the fracture surface revealed typical overload deformation. Prior to this occurrence, no mechanical problems with the airplane were reported by the pilot. Reportedly, during the wreckage examination, a small amount of corrosion was also discovered on the nose gear attach point.

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	38, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	95 hours (Total, all aircraft), 90 hours (Total, this make and model), 5 hours (Pilot In Command, all aircraft), 40 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N3621Q
<b>Model/Series:</b>	23 23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	MB-239
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	100 hour	<b>Certified Max Gross Wt.:</b>	1500 lbs
<b>Time Since Last Inspection:</b>	20 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3000 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320A4K
<b>Registered Owner:</b>	PATRICIA PEREIRA	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	CAMILO PEREIRA	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	JAX ,30 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	19:55 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	150°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 16°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	CUMMING , GA (84A )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(JIA )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:30 Local	<b>Type of Airspace:</b>	Class A

## Airport Information

<b>Airport:</b>	JACKSONVILLE INTERNATIONAL JAX	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	30 ft msl	<b>Runway Surface Condition:</b>	Dry;Rough
<b>Runway Used:</b>	7	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	10000 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

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

## Administrative Information

**Investigator In Charge (IIC):** Powell, Phillip

**Additional Participating Persons:** MIKE CURTIS;

**Original Publish Date:** August 21, 2001

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=45930>

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