



# Aviation Investigation Final Report

<b>Location:</b>	PENSACOLA, Florida	<b>Accident Number:</b>	MIA94LA149
<b>Date &amp; Time:</b>	May 23, 1994, 16:44 Local	<b>Registration:</b>	N6166Y
<b>Aircraft:</b>	BEECH 65	<b>Aircraft Damage:</b>	Minor
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Ferry		

## Analysis

AS THE PILOT WAS MAKING A LEFT TURN AFTER STARTING TO TAXI, THE AIRCRAFT'S NOSEWHEEL ASSEMBLY CAME APART (EXPLODED) AND ONE SPLIT RIM STRUCK A GROUND OBSERVER, SEVERING HIS LEG. EXAMINATION REVEALED THAT THE NUTS ON THE THROUGH-BOLTS FOR THE SPLIT RIM WERE IMPROPER AND THAT THE TIRES MAY HAVE BEEN OVER-INFLATED. THE AIRPLANE RECORDS WERE NOT COMPLETE. THE INVESTIGATION DID NOT ASCERTAIN WHO HAD INSTALLED THE WRONG NUTS OR WHEN THE INSTALLION HAD BEEN PERFORMED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER INSTALLATION OF NUTS ON THE NOSEWHEEL (SPLIT RIM) THROUGH-BOLTS BY UNKNOWN PERSONNEL, WHICH RESULTED IN A SUBSEQUENT FAILURE (SEPARATION OF THE WHEEL HALVES).

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: TAXI - TO TAKEOFF

- Findings
1. (C) MAINTENANCE, INSTALLATION - IMPROPER - UNKNOWN

2. (C) MISCELLANEOUS,BOLT/NUT/FASTENER/CLAMP/SPRING - IMPROPER
3. (C) LANDING GEAR,WHEEL - FAILURE

## Factual Information

On May 24, 1994, about 1644 central daylight time, N6166Y a Beech BE-65 was involved in a taxi accident at Pensacola Naval Air Station, Pensacola, Florida. The airplane was registered to Smith/Perkins Inc. and was operating as a 14 CFR 91 ferry flight. The airplane received minor damage and one person on the ground received serious injuries. The pilot and his passenger were not injured. Visual meteorological conditions prevailed and a military VFR flight plan was filed along with a weather briefing obtained from a Navy meteorologist. The flight was originating at the time of the accident.

The airplane started its taxi from the ramp when the nose wheel split rim exploded. A piece of the tire rim severed a ground observer's leg. Investigation revealed that the nuts on the through bolts for the split rims were improper, and the tires may have been over inflated with bottled dry nitrogen.

The pilot-in-command had also acquired a ferry permit that specifically stated it would be conducted with certain limitations, including, carriage of cargo or persons other than crew for the purpose of the flight would be prohibited.

### Pilot Information

<b>Certificate:</b>	Airline transport; Flight instructor	<b>Age:</b>	67, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	April 28, 1994
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	29443 hours (Total, all aircraft), 11 hours (Total, this make and model), 22800 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BEECH	<b>Registration:</b>	N6166Y
<b>Model/Series:</b>	65 65	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Special flight (Special)	<b>Serial Number:</b>	LD388
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	Annual	<b>Certified Max Gross Wt.:</b>	8000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	4417 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	IO-435
<b>Registered Owner:</b>	PERKINS SMITH INC.	<b>Rated Power:</b>	340 Horsepower
<b>Operator:</b>	PERKINS SMITH INC.	<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>	Day
<b>Observation Facility, Elevation:</b>	NPA ,17 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	17:40 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Scattered / 4000 ft AGL	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	11 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	210°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 16°C
<b>Precipitation and Obscuration:</b>	N/A - None - Haze		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:30 Local	<b>Type of Airspace:</b>	Class D;Class E

## Airport Information

<b>Airport:</b>	NAS SHERMAN FIELD NPA	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	17 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Minor
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	1 Serious	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Serious, 1 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Alston, Andrew
<b>Additional Participating Persons:</b>	RODGER L HOLMSTROM; BIRMINGHAM , AL
<b>Original Publish Date:</b>	April 7, 1995
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=37551">https://data.ntsb.gov/Docket?ProjectID=37551</a>

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