



# Aviation Investigation Final Report

<b>Location:</b>	TULSA, Oklahoma	<b>Incident Number:</b>	FTW84IA135
<b>Date &amp; Time:</b>	February 15, 1984, 10:10 Local	<b>Registration:</b>	N903TC
<b>Aircraft:</b>	NIHON                      YS-11	<b>Aircraft Damage:</b>	None
<b>Defining Event:</b>		<b>Injuries:</b>	20 None
<b>Flight Conducted Under:</b>	Part 121: Air carrier - Scheduled		

## Analysis

THE ACFT EXPERIENCED A NOSE WHEEL STEERING MALFUNCTION & RAN OFF THE RWY DURING LANDING. THE NOSE WHEEL SYSTEM WAS REMOVED FROM THE ACFT & SUBMITTED FOR INSPECTION & OVERHAUL. EXAMINATION REVEALED THAT THE LEVER SHAFT 'EARS' HAD SEPARATED FROM FATIGUE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this incident to be:

### Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: UNKNOWN

#### Findings

1. (C) LANDING GEAR,STEERING SYSTEM - FATIGUE

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

Findings

2. TERRAIN CONDITION - GROUND
3. TERRAIN CONDITION - WET

## Factual Information

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	35, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	November 9, 1983
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6000 hours (Total, all aircraft), 800 hours (Total, this make and model)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	NIHON	<b>Registration:</b>	N903TC
<b>Model/Series:</b>	YS-11 YS-11	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	2044
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	55
<b>Date/Type of Last Inspection:</b>	Continuous airworthiness	<b>Certified Max Gross Wt.:</b>	51800 lbs
<b>Time Since Last Inspection:</b>	51 Hrs	<b>Engines:</b>	2 Turbo prop
<b>Airframe Total Time:</b>	21772 Hrs	<b>Engine Manufacturer:</b>	ROLLS-ROYCE
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	DART 542-10J
<b>Registered Owner:</b>	TRANSCENTRAL AIRLINE CORP.	<b>Rated Power:</b>	2305 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	Flag carrier (121)
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	TRCA

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	TUL ,676 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	09:50 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown / 1700 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Overcast / 1700 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	23 knots / 30 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	150°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	14°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	LITTLE ROCK , AR (LIT )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	TULSA , OK (TUL )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	00:11 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	TULSA INT'L TUL	<b>Runway Surface Type:</b>	Asphalt;Concrete
<b>Airport Elevation:</b>	676 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17L	<b>IFR Approach:</b>	ILS
<b>Runway Length/Width:</b>	10000 ft / 200 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	4 None	<b>Aircraft Damage:</b>	None
<b>Passenger Injuries:</b>	16 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	20 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Daugherty, J
<b>Additional Participating Persons:</b>	WILLIAM B MADSEN; OKLAHOMA CITY , OK
<b>Original Publish Date:</b>	
<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=21161">https://data.ntsb.gov/Docket?ProjectID=21161</a>

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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 [here](#).