



National Transportation Safety Board Aviation Incident Data Summary

Location:	CHARLOTTE, NC	Incident Number:	ATL94IA088
Date & Time:	05/01/1994, 1309 EDT	Registration:	N890US
Aircraft:	FOKKER F28 MK 0100	Injuries:	94 None
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Analysis

THE FLIGHTCREW REPORTED THAT WHILE EXTENDING THE LANDING GEAR, THE NOSE GEAR DID NOT INDICATE DOWN AND LOCKED. AFTER FURTHER ATTEMPTS TO LOWER THE NOSE GEAR WERE UNSUCCESSFUL, THE AIRCRAFT WAS LANDED WITH THE NOSE GEAR NOT DOWN AND LOCKED. INSPECTION REVEALED THAT THE NOSEWHEEL STEERING SYSTEM WAS INCORRECTLY RIGGED; THE NOSE GEAR WOULD NOT PROPERLY CENTER ITSELF, AND THE NOSEWHEEL STEERING CABLE TENSIONS WERE BELOW REQUIRED LIMITS. THIS RESULTED IN A SITUATION WHERE THE NOSE GEAR WOULD IMPINGE ON THE SIDE WALL OF THE GEAR WELL, PREVENTING EXTENSION. THE AIRCRAFT MANUFACTURER REPORTED THAT IT REQUIRED A COMBINATION OF NOSE GEAR MISRIGGING, WITH REDUCED CABLE TENSIONS, TO DUPLICATE THIS SCENARIO. ABOUT TWO WEEKS PRIOR TO THE INCIDENT, THE NOSEWHEEL STEERING CONTROL VALVE WAS REPLACED, WHICH WOULD HAVE REQUIRED A CHECK OF THE NOSE GEAR RIGGING.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: THE IMPROPER RIGGING OF THE NOSE WHEEL STEERING SYSTEM BY COMPANY MAINTENANCE PERSONNEL.

Findings

Occurrence #1:

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR,STEERING SYSTEM - INCORRECT
2. (C) MAINTENANCE - IMPROPER - COMPANY MAINTENANCE PERSONNEL
3. LANDING GEAR,NOSE GEAR - JAMMED

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial; Flight Engineer	Age:	41
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine
Flight Time:	9000 hours (Total, all aircraft), 1000 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	FOKKER	Registration:	N890US
Model/Series:	F28 MK 0100 F28 MK 010	Engines:	2 Turbo Fan
Operator:	USAIR, INC.	Engine Manufacturer:	Rolls-Royce
Operating Certificate(s) Held:	Flag carrier (121)	Engine Model/Series:	TAY MK650-15
Flight Conducted Under:	Part 121: Air Carrier - Scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CLT, 749 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	12 knots / , 240°
Temperature:	28°C	Visibility	25 Miles
Precipitation and Obscuration:			
Departure Point:	DETROIT, MI (DTW)	Destination:	, NC (CLT)

Airport Information

Airport:	DOUGLAS INTERNATIONAL (CLT)	Runway Surface Type:	Concrete
Runway Used:	18R	Runway Surface Condition:	Dry
Runway Length/Width:	10000 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	5 None	Aircraft Damage:	Minor
Passenger Injuries:	89 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): RALPH E HICKS,

Adopted Date: 04/27/1995

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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