



National Transportation Safety Board

Aviation Incident Data Summary

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|--------------------------------|---------------------------------------|-------------------------|------------|
| Location: | MOLINE, IL | Incident Number: | CHI89IA084 |
| Date & Time: | 05/03/1989, 2007 CDT | Registration: | N511AW |
| Aircraft: | FOKKER F-27 MK500 | Injuries: | 2 None |
| Flight Conducted Under: | Part 121: Air Carrier - Non-scheduled | | |

Analysis

THE AIRPLANE LANDED WITH THE RIGHT MAIN LANDING GEAR NOT FULLY DOWN AND LOCKED. WHEN THE AIRPLANE TOUCHED DOWN, THE LANDING GEAR WOULD NOT SUPPORT THE WEIGHT OF THE AIRPLANE AND IT COLLAPSED. THE AIRPLANE SUSTAINED MINOR DAMAGE AND NEITHER OF THE TWO CREWMEMBERS ABOARD THE AIRPLANE WERE INJURED. THE LANDING GEAR MALFUNCTION HAD BEEN DISCOVERED WHEN THE LANDING GEAR WOULD NOT CYCLE PROPERLY DURING A MAINTENANCE CHECK FLIGHT. WHEN THE FLIGHT CREW ATTEMPTED TO LOWER THE LANDING GEAR AFTER RETRACTION, THE RIGHT MAIN LANDING GEAR WOULD NOT FULLY EXTEND. ATTEMPTS TO EXTEND THE LANDING GEAR USING EMERGENCY PROCEDURES WERE NOT SUCCESSFUL.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this incident to be: MATERIAL FAILURE OF THE LANDING GEAR RETRACTION AND EXTENSION ASSEMBLY. INADEQUATE MAINTENANCE AND TROUBLESHOOTING PROCEDURES IN COMPANY DIRECTIVES WERE FACTORS IN THIS INCIDENT.

Findings

Occurrence #1: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - BINDING(MECHANICAL)
2. (C) MAINTENANCE,INSPECTION - INADEQUATE - COMPANY/OPERATOR MANAGEMENT
3. (F) PROCEDURE INADEQUATE - COMPANY/OPERATOR MANAGEMENT

Pilot Information

| | | | |
|----------------------------------|--|------------------------------|----------|
| Certificate: | Airline Transport; Commercial | Age: | 45 |
| Airplane Rating(s): | Multi-engine Land; Single-engine Land | Instrument Rating(s): | Airplane |
| Other Aircraft Rating(s): | None | Instructor Rating(s): | None |
| Flight Time: | 17121 hours (Total, all aircraft), 2262 hours (Total, this make and model), 14988 hours (Pilot In Command, all aircraft), 175 hours (Last 90 days, all aircraft), 66 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|---------------------------------------|---------------------------------------|-----------------------------|--------------|
| Aircraft Make: | FOKKER | Registration: | N511AW |
| Model/Series: | F-27 MK500 F-27 MK500 | Engines: | 2 Turbo Prop |
| Operator: | AIR WISCONSIN | Engine Manufacturer: | Rolls-Royce |
| Operating Certificate(s) Held: | Flag carrier (121) | Engine Model/Series: | DART 552-7R |
| Flight Conducted Under: | Part 121: Air Carrier - Non-scheduled | | |

Meteorological Information and Flight Plan

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|---|-------------------|-------------------------------------|------------------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Night/Bright |
| Observation Facility, Elevation: | MLI, 589 ft msl | Weather Information Source: | Weather Observation Facility |
| Lowest Ceiling: | None / 0 ft agl | Wind Speed/Gusts, Direction: | 5 knots / , 200° |
| Temperature: | 16°C | Visibility | 12 Miles |
| Precipitation and Obscuration: | | | |
| Departure Point: | CHICAGO, IL (ORD) | Destination: | |

Airport Information

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|-----------------------------|-------------------|----------------------------------|----------|
| Airport: | QUAD CITIES (MLI) | Runway Surface Type: | Concrete |
| Runway Used: | 27 | Runway Surface Condition: | Dry |
| Runway Length/Width: | 8507 ft / 150 ft | | |

Wreckage and Impact Information

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|-----------------------------|--------|----------------------------|-------|
| Crew Injuries: | 2 None | Aircraft Damage: | Minor |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Latitude, Longitude: | | | |

Administrative Information

Investigator In Charge (IIC): WILLIAM C BRUCE

Adopted Date: 08/26/1992

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/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.