
Landing with nose gear retracted, McDonnell Douglas MD-80, October 28, 1996

Micro-summary: This McDonnell Douglas MD-80 landed with its nose gear retracted.


Event Date: 1996-10-28 at 2231 EST


Investigative Body: National Transportation Safety Board (NTSB), USA


Investigative Body's Web Site: <http://www.nts.gov/>

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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: NYC97LA009		Aircraft Registration Number: N244AA	
		Occurrence Date: 10/28/1996		Most Critical Injury: Serious	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place JAMAICA		State NY	Zip Code 11430	Local Time 2231	Time Zone EST
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer McDonnell Douglas		Model/Series MD-80		Type of Aircraft Airplane	
Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>On October 28, 1996, about 2231 Eastern Standard Time, American Airlines flight 346, a McDonnell Douglas MD-80, N244AA, sustained minor damage while landing with the nose gear retracted at John F. Kennedy International Airport (JFK), Jamaica, New York. Visual meteorological conditions prevailed for the flight that departed Chicago O'Hare International Airport, Chicago, Illinois; destined for LaGuardia Airport (LGA), Flushing, New York. There were 93 occupants on board; 1 passenger received serious injuries, and 2 passengers received minor injuries. An instrument flight rules flight plan was filed for the air carrier flight conducted under 14 CFR Part 121.</p> <p>The flight was inbound to Runway 31 at LGA when the flight crew observed an unsafe nose gear indication. A low approach was made at LGA for ground personnel to visually determine the nose gear position. They could not confirm the nose gear was down and locked. The flight crew decided to divert to JFK, where a landing was made on Runway 31R, and a subsequent emergency evacuation was performed.</p> <p>Examination of the wreckage revealed that the nose landing gear upper lock link (P/N 3914464-503) was fractured into two pieces. The linkage jammed against the shock strut structure, preventing extension of the strut.</p> <p>According to an analysis by McDonnell Douglas, the upper lock link failed because it was made from a substitute material (aluminum plate) in place of aluminum forging. The aluminum plate had a lower allowable fatigue in comparison to aluminum forging.</p> <p>A representative from McDonnell Douglas stated that the original aluminum forging was replaced by aluminum plating because of lighter weight. After the accident, the company replaced all aluminum plated links with aluminum forging.</p> <p>American Airlines conducted a fleet wide inspection, and found one other cracked lock link.</p>					
FACTUAL REPORT - AVIATION					

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		Occurrence Date: 10/28/1996			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
JOHN F. KENNEDY INTL APT	JFK	13 Ft. MSL	31R	10000	150
Runway Surface Type: Asphalt					
Runway Surface Condition: Dry					
Type Instrument Approach: ILS-complete					
VFR Approach/Landing: Full Stop; Straight-in					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
McDonnell Douglas		MD-80		49256	
Airworthiness Certificate(s): Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 146	Certified Max Gross Wt.	150500 LBS	Number of Engines: 2	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	P&W	JT8D	20000 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Unknown		Hours	Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed? Yes	ELT Operated? No	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
FLEET NATIONAL BANK		777 MAIN STREET			
		City	State	Zip Code	
		HARTFORD	CT	06115	
Operator of Aircraft		Street Address			
AMERICAN AIRLINES, INC		4333 AMON CARTER BLVD			
		City	State	Zip Code	
		FORT WORTH	TX	76155	
Operator Does Business As:			Operator Designator Code: AALA		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s): Flag Carrier/Domestic					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 121: Air Carrier					
Type of Flight Operation Conducted: Scheduled; Domestic; Passenger/Cargo					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: NYC97LA009
	Occurrence Date: 10/28/1996
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 46
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Sex: U	Seat Occupied: Left	Principal Profession: Civilian Pilot	Certificate Number: On File
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Certificate(s): Airline Transport

Airplane Rating(s): Multi-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Type Rating/Endorsement for Accident/Incident Aircraft? Yes	Current Biennial Flight Review?
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Medical Cert.: Class 1	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 08/1996
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	4895	3816								
Pilot In Command(PIC)	2502									
Instructor										
Last 90 Days	132									
Last 30 Days	54									
Last 24 Hours										

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? Yes
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Flight Plan/Itinerary

Type of Flight Plan Filed: IFR

Departure Point CHICAGO	State IL	Airport Identifier ORD	Departure Time 2005	Time Zone EDT
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Destination FLUSHING	State NY	Airport Identifier LGA	
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Type of Clearance: IFR

Type of Airspace: Class B

Weather Information

Source of Briefing: Company

Method of Briefing:

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Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
JFK	2255	EST	13 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			0 Ft. AGL	Condition of Light: Night/Dark	
Lowest Ceiling: None		0 Ft. AGL		Visibility: 10 SM	Altimeter: 29.00 "Hg
Temperature: 10 °C	Dew Point: 0 °C	Wind Direction: 320		Density Altitude: Ft.	
Wind Speed: 19	Gusts: 30	Weather Conditions at Accident Site: Visual Conditions			
Visibility (RVR): 0 Ft.	Visibility (RVV) 0 SM	Intensity of Precipitation: Unknown			
Restrictions to Visibility: None					
Type of Precipitation: None					

Accident Information		
Aircraft Damage: Minor	Aircraft Fire: None	Aircraft Explosion: None

Classification: U.S. Registered/U.S. Soil					
- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot				1	1
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants				3	3
Other Crew					
Passengers		1	2	85	88
- TOTAL ABOARD -		1	2	90	93
Other Ground	0	0	0		0
- GRAND TOTAL -	0	1	2	90	93

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: NYC97LA009

Occurrence Date: 10/28/1996

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

DENNIS L. JONES

Additional Persons Participating in This Accident/Incident Investigation:

SAL SCALONE
FAA FSDO 15
GARDEN CITY, NY