
Collision with loading dock, McDonnell Douglas DC-10-30F, Newark, March 1, 2000

Micro-summary: This McDonnell Douglas DC-10-30F was substantially damaged during pushback when it collided with the loading dock.


Event Date: 2000-03-01 at 0347 EST


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


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

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		NTSB ID: NYC00LA086		Aircraft Registration Number: N302FE	
		Occurrence Date: 03/01/2000		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place NEWARK		State NJ	Zip Code 07101	Local Time 0347	Time Zone EST
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer McDonnell Douglas		Model/Series DC-10-30F		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 March 1, 2000, at 0347 Eastern Standard Time, a McDonnell Douglas DC-10-30F, N302FE, operated by Federal Express, was substantially damaged during pushback at Newark International Airport (EWR), Newark, New Jersey. On the airplane, the captain, first officer, flight engineer and two couriers were uninjured. On the ground, three maintenance technicians were also uninjured. Visual meteorological conditions prevailed at the time of the accident. An instrument flight rules flight plan had been filed for the cargo flight, between Newark and Memphis International Airport (MEM), Memphis, Tennessee. The flight was to be conducted under 14 CFR Part 121.</p> <p>According to a Federal Aviation Administration (FAA) Inspector, the airplane was taxiing to the runway for departure when the APU door light illuminated. The airplane returned to the loading dock, the engines were shut down, the APU door was closed, and the APU was secured. The airplane's engines were then restarted at the dock, and the airplane began another pushback. During that pushback, it contacted the loading dock, and suffered an 8-foot gash along the left side, below the cockpit area.</p> <p>According to a company safety analyst, for the pushback, one of the maintenance technicians was "on a headset," next to the right side of the airplane. Another technician was acting as a "wing walker," aft of the airplane, and a third technician was driving the tug. The "headset man" stated that the crew gave permission to push back. Halfway through the pushback, the captain told him to stop because he thought the airplane had contacted the loading dock. The headset man walked to the left side of the airplane and then saw the gash.</p> <p>The tug operator stated that he was using a different tug than the one used during the first pushback. The tug had a "2-wheel working fault" indication. After receiving clearance to push, the tug operator "made a gradual turn to avoid equipment and minimize jet blast to other gates. Halfway down the ramp, [I] received [a] stop signal."</p> <p>The safety analyst further stated that, originally, the tug operator had insisted that there were problems with "the tug's drive mechanism sticking in 2-wheel mode or the crab mode." Post-accident investigation of the tug revealed no anomalies, although other mechanics subsequently complained about the same intermittent problem. Components were removed for testing, with no anomalies found; however, once those components were replaced, there were no additional problems with the tug.</p> <p>A representative from the tug's manufacturer stated that "regardless of...system status, the operator will always have control of the front wheel steering and braking."</p>					
FACTUAL REPORT - AVIATION					
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 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: NYC00LA086				
		Occurrence Date: 03/01/2000				
		Occurrence Type: Accident				
Landing Facility/Approach Information						
Airport Name NEWARK INTL AIRPORT		Airport ID: EWR	Airport Elevation Ft. MSL	Runway Used 0	Runway Length	Runway Width
Runway Surface Type:						
Runway Surface Condition: Dry						
Type Instrument Approach: NONE						
VFR Approach/Landing: None						
Aircraft Information						
Aircraft Manufacturer McDonnell Douglas		Model/Series DC-10-30F		Serial Number 46801		
Airworthiness Certificate(s): Transport						
Landing Gear Type: Retractable - Tricycle						
Homebuilt Aircraft? No		Number of Seats: 7	Certified Max Gross Wt. 565000 LBS		Number of Engines: 3	
Engine Type: Turbo Fan		Engine Manufacturer: GE		Model/Series: CF6-502C	Rated Power: 52000 LBS	
- Aircraft Inspection Information						
Type of Last Inspection Continuous Airworthiness		Date of Last Inspection 03/2000	Time Since Last Inspection 1 Hours		Airframe Total Time 64258 Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed? Yes		ELT Operated? No		ELT Aided in Locating Accident Site?		
Owner/Operator Information						
Registered Aircraft Owner FEDERAL EXPRESS CORP		Street Address P.O. BOX 727				
		City MEMPHIS		State TN	Zip Code 38018	
Operator of Aircraft Same as Reg'd Aircraft Owner		Street Address Same as Reg'd Aircraft Owner				
		City		State	Zip Code	
Operator Does Business As:				Operator Designator Code: FDEA		
- Type of U.S. Certificate(s) Held:						
Air Carrier Operating Certificate(s): Cargo						
Operating Certificate:			Operator Certificate:			
Regulation Flight Conducted Under: Part 121: Air Carrier						
Type of Flight Operation Conducted: Non-scheduled; Domestic; Cargo						
FACTUAL REPORT - AVIATION						

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: NYC00LA086
	Occurrence Date: 03/01/2000
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 55
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Sex: M	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: 12/1999
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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	6842	4745								
Pilot In Command(PIC)	1572	1572								
Instructor										
Last 90 Days	110	110								
Last 30 Days										
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 Same as Accident/Incident Location	State	Airport Identifier EWR	Departure Time 0000	Time Zone
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Destination MEMPHIS	State TN	Airport Identifier MEM	
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Type of Clearance:

Type of Airspace:

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
EWR	0351	EST	18 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: 30.00 "Hg
Temperature: 3 °C	Dew Point: -3 °C	Wind Direction: 50		Density Altitude: Ft.	
Wind Speed: 7	Gusts:	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: Substantial	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				1	1
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -				3	3
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	3	3

National Transportation Safety Board

FACTUAL REPORT

AVIATION



NTSB ID: NYC00LA086

Occurrence Date: 03/01/2000

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

PAUL R. COX

Additional Persons Participating in This Accident/Incident Investigation:

DOMINICK DELEO
FAA/FSDO
TETERBORO, NJ,