
Gear-up landing, Boeing 727-243, April 2, 1994

Micro-summary: Gear-up landing for this Boeing 727-243.


Event Date: 1994-04-02 at 1439 EST


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


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


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 2. Readers are advised that each report is a glimpse of events at specific points in time. While broad themes permeate the causal events leading up to crashes, and we can learn from those, the specific regulatory and technological environments can and do change. ***Your company's flight operations manual is the final authority as to the safe operation of your aircraft!***
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		NTSB ID: MIA94IA110		Aircraft Registration Number: N59412	
		Occurrence Date: 04/02/1994		Most Critical Injury: None	
		Occurrence Type: Incident		Investigated By: NTSB	
Location/Time					
Nearest City/Place ORLANDO	State FL	Zip Code 32827	Local Time 1439	Time Zone EST	
Airport Proximity: On Airport		Distance From Landing Facility:		Direction From Airport:	
Aircraft Information Summary					
Aircraft Manufacturer BOEING		Model/Series 727-243		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 April 2, 1994, about 1439 eastern standard time, a Boeing 727-243, N59412, registered to Wilmington Trust Company Trustee, leased to and operating as Continental Airlines Flight 1447, on a 14 CFR Part 121 scheduled domestic passenger diverted from the planned destination airport, and landed at Orlando International Airport with the left main landing gear in the up position. The airplane sustained minor damage. The airline transport pilot-in-command, first officer, flight engineer, 6 cabin attendants, and 141 passengers exited the airplane down the emergency slide from the left forward door without injury. Visual meteorological conditions prevailed and an IFR flight plan was filed. The flight originated from Newark, New Jersey, about 3 hours 54 minutes before the incident.</p> <p>The airplane came to rest on runway 18R on the left wing leading edge slats, trailing edge flaps, left wing tip, nose tires, and the right main landing gear. Initial examination of the left landing gear system, revealed the left main landing gear door rib attachment fitting had failed preventing the landing gear from extending. Examination of the fitting by the NTSB Materials Laboratory Division, revealed the failure was due to fatigue cracking in the fitting. Review of aircraft records revealed pertinent service bulletins and airworthiness directives pertaining to the fitting had been recorded as having been completed. (For additional information see NTSB Systems Group Chairman's Factual Report, and NTSB Metallurgist's Factual Report).</p> <p>The digital flight data recorder (DFDR) was forwarded to the NTSB Office of Engineering for analysis. Readout of the recorder revealed the unit was working properly, but not receiving valid data from the flight data acquisition unit (FDAU), due to either a failed FDAU or a failed connection between the FDAU and DFDR. (For additional information see NTSB Digital Flight Data Recorder Factual Report).</p> <p>The airplane was released to Continental Airlines on April 5, 1994.</p>					
FACTUAL REPORT - AVIATION					

 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: MIA94IA110			
		Occurrence Date: 04/02/1994			
		Occurrence Type: Incident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
ORLANDO INTERNATIONAL	MCO	96 Ft. MSL	18R	12004	200
Runway Surface Type: Asphalt					
Runway Surface Condition: Dry					
Type Instrument Approach: Visual					
VFR Approach/Landing: Forced Landing; Touch and Go; Traffic Pattern					
Aircraft Information					
Aircraft Manufacturer		Model/Series		Serial Number	
BOEING		727-243		22053	
Airworthiness Certificate(s): Limited (Special); Normal; Transport					
Landing Gear Type: Retractable - Tricycle					
Homebuilt Aircraft? No	Number of Seats: 158	Certified Max Gross Wt.	175500 LBS	Number of Engines: 3	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Turbo Fan	P&W	JT8D-9A	21450 LBS		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Continuous Airworthiness	02/1994	299 Hours	34039 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?	ELT Operated?	ELT Aided in Locating Accident Site?			
Owner/Operator Information					
Registered Aircraft Owner		Street Address			
		2929 ALLEN PARKWAY			
CONTINENTAL AIRLINES		City	State	Zip Code	
		HOUSTON	TX	77021	
Operator of Aircraft		Street Address			
		Same as Reg'd Aircraft Owner			
Same as Reg'd Aircraft Owner		City	State	Zip Code	
Operator Does Business As:			Operator Designator Code: CALA		
- 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 Only					
FACTUAL REPORT - AVIATION					

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First Pilot Information																																																																																				
Name		City		State	Date of Birth	Age																																																																														
On File		On File		On File	On File	47																																																																														
Sex: M	Seat Occupied: Left	Principal Profession: Civilian Pilot		Certificate Number: On File																																																																																
Certificate(s): Airline Transport; Commercial																																																																																				
Airplane Rating(s): Multi-engine Land; Single-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?																																																																																
Medical Cert.: Class 1		Medical Cert. Status: Valid Medical--no waivers/lim.		Date of Last Medical Exam: 03/1994																																																																																
<table border="1"> <tr> <th rowspan="2">- Flight Time Matrix</th> <th rowspan="2">All A/C</th> <th rowspan="2">This Make and Model</th> <th rowspan="2">Airplane Single Engine</th> <th rowspan="2">Airplane Multi-Engine</th> <th rowspan="2">Night</th> <th colspan="2">Instrument</th> <th rowspan="2">Rotorcraft</th> <th rowspan="2">Glider</th> <th rowspan="2">Lighter Than Air</th> </tr> <tr> <th>Actual</th> <th>Simulated</th> </tr> <tr> <td>Total Time</td> <td>14500</td> <td>4000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Pilot In Command(PIC)</td> <td>13000</td> <td>4000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Instructor</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 90 Days</td> <td>177</td> <td>177</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 30 Days</td> <td>53</td> <td>53</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Last 24 Hours</td> <td>8</td> <td>8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>						- 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	14500	4000									Pilot In Command(PIC)	13000	4000									Instructor											Last 90 Days	177	177									Last 30 Days	53	53									Last 24 Hours	8	8								
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Last 24 Hours	8	8																																																																																		
Seatbelt Used? Yes		Shoulder Harness Used? Yes		Toxicology Performed?		Second Pilot? Yes																																																																														
Flight Plan/Itinerary																																																																																				
Type of Flight Plan Filed: IFR																																																																																				
Departure Point		State	Airport Identifier	Departure Time	Time Zone																																																																															
NEWARK		NJ	EWR	1045	EST																																																																															
Destination		State	Airport Identifier																																																																																	
FT. MYERS		FL	RSW																																																																																	
Type of Clearance: IFR																																																																																				
Type of Airspace: Class D																																																																																				
Weather Information																																																																																				
Source of Briefing: Commercial Weather Service; Flight Service Station; PATWAS																																																																																				
Method of Briefing:																																																																																				

 National Transportation Safety Board FACTUAL REPORT AVIATION			NTSB ID: MIA94IA110		
			Occurrence Date: 04/02/1994		
			Occurrence Type: Incident		
Weather Information					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
MCO	1620	EST	96 Ft. MSL	0 NM	0 Deg. Mag.
Sky/Lowest Cloud Condition: Scattered			4900 Ft. AGL	Condition of Light: Day	
Lowest Ceiling: None			0 Ft. AGL	Visibility: 10 SM	Altimeter: 30.00 "Hg
Temperature: 23 °C		Dew Point: 13 °C	Wind Direction: 50		Density Altitude: Ft.
Wind Speed: 12		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: 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				1	1
Cabin Attendants				6	6
Other Crew					
Passengers				141	141
- TOTAL ABOARD -				150	150
Other Ground	0	0	0		0
- GRAND TOTAL -	0	0	0	150	150

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	Occurrence Date: 04/02/1994	
	Occurrence Type: Incident	
Administrative Information		
Investigator-In-Charge (IIC) CARROL A. SMITH		
Additional Persons Participating in This Accident/Incident Investigation: EMANUEL SYLVIA ORLANDO FSDO ORLANDO, FL 32827 LOUIS FABIANO CONTINENTAL AIRLINES ORLANDO, FL 32827 EDWARD TOMLINSON BOEING COMMERCIAL AIRPLANES SEATTLE, WA 98124		
FACTUAL REPORT - AVIATION		