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## Fast level off produces broken leg, Boeing 757-232, June 2, 2002

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**Micro-summary:** During a level off following a TCAS advisory, a flight attendant fell and experienced a fractured leg.

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**Event Date:** 2002-06-02 at 1327 EDT


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


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


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1. Accident reports can be and sometimes are revised. Be sure to consult the investigative agency for the latest version before basing anything significant on content (e.g., thesis, research, etc).
  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!***
  3. Reports may or may not represent reality. Many many non-scientific factors go into an investigation, including the magnitude of the event, the experience of the investigator, the political climate, relationship with the regulatory authority, technological and recovery capabilities, etc. It is recommended that the reader review all reports analytically. Even a "bad" report can be a very useful launching point for learning.
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|   |  |                                 |                                  |                                      |                  |
|---|--|---------------------------------|----------------------------------|--------------------------------------|------------------|
|   |  | NTSB ID: NYC02LA110             |                                  | Aircraft Registration Number: N694DL |                  |
|   |  | Occurrence Date: 06/02/2002     |                                  | Most Critical Injury: Serious        |                  |
|   |  | Occurrence Type: Accident       |                                  | Investigated By: NTSB                |                  |
| Location/Time   |  |                                 |                                  |                                      |                  |
| Nearest City/Place<br>Fairfield   |  | State<br>IL                     | Zip Code<br>62837                | Local Time<br>1327                   | Time Zone<br>EDT |
| Airport Proximity: Off Airport/Airstrip   |  | Distance From Landing Facility: |                                  | Direction From Airport:              |                  |
| Aircraft Information Summary  |  |                                 |                                  |                                      |                  |
| Aircraft Manufacturer<br>Boeing   |  | Model/Series<br>757-232         |                                  | Type of Aircraft<br>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 June 2, 2002, about 1327 eastern daylight time, a Boeing 757-232, N694DL, operated by Delta Airlines Inc., as flight 482, was not damaged while maneuvering near Fairfield, Illinois. The 2 certificated airline transport pilots, 108 passengers, and 3 flight attendants were not injured; however, 1 flight attendant was seriously injured, and 1 flight attendant sustained minor injuries. Instrument meteorological conditions prevailed and an instrument flight rules flight plan was filed for the flight that departed Denver International Airport (DEN), Denver Colorado, destined for Cincinnati/Northern Kentucky Airport (CVG), Covington, Kentucky. The scheduled passenger flight was conducted under 14 CFR Part 121.</p> <p>According to a flight safety investigator at Delta Airlines, the airplane crossed the JDUNN intersection at flight level 290 (FL 290). Air traffic control (ATC) then cleared the flight to FL 270. The first officer was the pilot flying, the autopilot was engaged, and the seatbelt sign was illuminated.</p> <p>The captain stated that during the descent, at 27,700 feet, the traffic collision avoidance system (TCAS) sounded "traffic, traffic, traffic," and displayed a target approximately 15 miles ahead and 700 feet below. No resolution advisory (RA) was received, but the flight was in instrument meteorological conditions and the flight crew was unable to visually identify the traffic. The captain then instructed the first officer to stop the descent. The first officer stated the he "quickly" leveled the airplane. Subsequently, a review of the TCAS and check with ATC revealed that the traffic was at FL 260, not FL 270.</p> <p>During the level off, a flight attendant fell and suffered a fractured leg. The airplane landed uneventfully at CVG, and the flight attendant was transported to a local hospital.</p> <p>A review of Delta Airline's 757/767 operations manual revealed that deviation from an ATC clearance was authorized for an RA only.</p> |  |                                 |                                  |                                      |                  |
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| <br><b>National Transportation Safety Board</b><br><b>FACTUAL REPORT</b><br><b>AVIATION</b> |  | NTSB ID: NYC02LA110                                |                                     |   |                                    |              |
|  |  | Occurrence Date: 06/02/2002                        |                                     |   |                                    |              |
|  |  | Occurrence Type: Accident                          |                                     |   |                                    |              |
| <b>Landing Facility/Approach Information</b>   |  |  |                                     |   |                                    |              |
| Airport Name   |  | Airport ID:  | Airport Elevation<br>Ft. MSL        | Runway Used                             | Runway Length                      | Runway Width |
| Runway Surface Type: Unknown   |  |  |                                     |   |                                    |              |
| Runway Surface Condition: Unknown  |  |  |                                     |   |                                    |              |
| Type Instrument Approach: NONE   |  |  |                                     |   |                                    |              |
| VFR Approach/Landing: None   |  |  |                                     |   |                                    |              |
| <b>Aircraft Information</b>  |  |  |                                     |   |                                    |              |
| Aircraft Manufacturer<br>Boeing  |  | Model/Series<br>757-232                            |                                     | Serial Number<br>29726                  |                                    |              |
| Airworthiness Certificate(s): Transport  |  |  |                                     |   |                                    |              |
| Landing Gear Type: Retractable - Tricycle  |  |  |                                     |   |                                    |              |
| Homebuilt Aircraft? No   |  | Number of Seats: 115                               | Certified Max Gross Wt. 232000 LBS  |   | Number of Engines: 2               |              |
| Engine Type:<br>Turbo Fan  |  | Engine Manufacturer:<br>Pratt & Whitney            |                                     | Model/Series:<br>PW2037                 | Rated Power:<br>37000 LBS          |              |
| - Aircraft Inspection Information  |  |  |                                     |   |                                    |              |
| Type of Last Inspection<br>Continuous Airworthiness  |  | Date of Last Inspection<br>04/2002                 | Time Since Last Inspection<br>Hours |   | Airframe Total Time<br>12206 Hours |              |
| - Emergency Locator Transmitter (ELT) Information  |  |  |                                     |   |                                    |              |
| ELT Installed? No  |  | ELT Operated? No                                   |                                     | ELT Aided in Locating Accident Site? No |                                    |              |
| <b>Owner/Operator Information</b>  |  |  |                                     |   |                                    |              |
| Registered Aircraft Owner<br>Delta Airlines Inc.   |  | Street Address<br>Hartsfield International Airport |                                     |   |                                    |              |
|  |  | City<br>Atlanta                                    |                                     | State<br>GA                             | Zip Code<br>30320                  |              |
| Operator of Aircraft<br>Same as Reg'd Aircraft Owner   |  | Street Address<br>Same as Reg'd Aircraft Owner     |                                     |   |                                    |              |
|  |  | City   |                                     | State                                   | Zip Code                           |              |
| Operator Does Business As:   |  |  |                                     | Operator Designator Code: DALA          |                                    |              |
| - 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  |  |  |                                     |   |                                    |              |

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|  <p><b>National Transportation Safety Board</b><br/><b>FACTUAL REPORT</b><br/><b>AVIATION</b></p> | NTSB ID: NYC02LA110         |
|  | Occurrence Date: 06/02/2002 |
|  | Occurrence Type: Accident   |

**First Pilot Information**

|                 |                 |                  |                          |           |
|-----------------|-----------------|------------------|--------------------------|-----------|
| Name<br>On File | City<br>On File | State<br>On File | Date of Birth<br>On File | Age<br>48 |
|-----------------|-----------------|------------------|--------------------------|-----------|

|        |                     |                                      |                             |
|--------|---------------------|--------------------------------------|-----------------------------|
| Sex: M | Seat Occupied: Left | Principal Profession: Civilian Pilot | Certificate Number: On File |
|--------|---------------------|--------------------------------------|-----------------------------|

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? 12/2001 |
|---|---|

|                        |                            |                                    |
|------------------------|----------------------------|------------------------------------|
| Medical Cert.: Class 1 | Medical Cert. Status: None | Date of Last Medical Exam: 04/2002 |
|------------------------|----------------------------|------------------------------------|

| - 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            | 17000   | 2204                |                        |                       |       |            |           |            |        |                  |
| Pilot In Command(PIC) |         |                     |                        |                       |       |            |           |            |        |                  |
| Instructor            |         |                     |                        |                       |       |            |           |            |        |                  |
| Last 90 Days          | 140     | 140                 |                        |                       |       |            |           |            |        |                  |
| Last 30 Days          |         |                     |                        |                       |       |            |           |            |        |                  |
| Last 24 Hours         | 8       | 8                   |                        |                       |       |            |           |            |        |                  |

|                    |                            |                          |                   |
|--------------------|----------------------------|--------------------------|-------------------|
| Seatbelt Used? Yes | Shoulder Harness Used? Yes | Toxicology Performed? No | Second Pilot? Yes |
|--------------------|----------------------------|--------------------------|-------------------|

**Flight Plan/Itinerary**

Type of Flight Plan Filed: IFR

|                              |             |                           |                        |                  |
|------------------------------|-------------|---------------------------|------------------------|------------------|
| Departure Point<br>Fairfield | State<br>IL | Airport Identifier<br>DEN | Departure Time<br>1115 | Time Zone<br>EDT |
|------------------------------|-------------|---------------------------|------------------------|------------------|

|                          |             |                           |  |
|--------------------------|-------------|---------------------------|--|
| Destination<br>Covington | State<br>KY | Airport Identifier<br>CVG |  |
|--------------------------|-------------|---------------------------|--|


Type of Clearance: IFR

Type of Airspace: Class A

**Weather Information**

Source of Briefing: Company

Method of Briefing: Telephone

|  |                             |
|--|-----------------------------|
|  <p><b>National Transportation Safety Board</b><br/><b>FACTUAL REPORT</b><br/><b>AVIATION</b></p> | NTSB ID: NYC02LA110         |
|  | Occurrence Date: 06/02/2002 |
|  | Occurrence Type: Accident   |

**Weather Information**

|                                       |                     |  |               |                                 |                              |
|---------------------------------------|---------------------|--|---------------|---------------------------------|------------------------------|
| WOF ID                                | Observation Time    | Time Zone  | WOF Elevation | WOF Distance From Accident Site | Direction From Accident Site |
| ENL                                   | 1325                | EDT  | 534 Ft. MSL   | 40 NM                           | 280 Deg. Mag.                |
| Sky/Lowest Cloud Condition: Scattered |                     |  | 4700 Ft. AGL  | Condition of Light: Day         |                              |
| Lowest Ceiling: None                  |                     |  | Ft. AGL       | Visibility: 10 SM               | Altimeter: 29.84 "Hg         |
| Temperature: 31 °C                    | Dew Point: 19 °C    | Wind Direction: 240  |               | Density Altitude: Ft.           |                              |
| Wind Speed: 6                         | Gusts:              | Weather Conditions at Accident Site: Instrument Conditions |               |                                 |                              |
| Visibility (RVR): Ft.                 | Visibility (RVV) SM | Intensity of Precipitation:                                |               |                                 |                              |
| Restrictions to Visibility: None      |                     |  |               |                                 |                              |
| Type of Precipitation: None           |                     |  |               |                                 |                              |

**Accident Information**

|                       |                     |                          |
|-----------------------|---------------------|--------------------------|
| Aircraft Damage: None | 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        |       | 1       | 1     | 3    | 5     |
| Other Crew              |       |         |       |      |       |
| Passengers              |       |         |       | 108  | 108   |
| - TOTAL ABOARD -        |       | 1       | 1     | 113  | 115   |
| Other Ground            |       |         |       |      |       |
| - GRAND TOTAL -         |       | 1       | 1     | 113  | 115   |

National Transportation Safety Board

**FACTUAL REPORT**

**AVIATION**



NTSB ID: NYC02LA110

Occurrence Date: 06/02/2002

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Robert J. Gretz

Additional Persons Participating in This Accident/Incident Investigation:

Randy Sizemore  
FAA FSDO-01  
Louisville, KY