



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

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Attachment 10 – Delta Air Lines On-Board Manual [Excerpts]

OPERATIONAL FACTORS

DCA19CA091

Trash Collection and Disposal

To collect and dispose of trash:

1. Collect food and beverage trash and containers using trash cart, meal cart with lined trash box, or trays.
2. Dispose all bags of trash in galley carts or containers.

- ❗ • Federal regulations prohibit securing bags of trash in lavatories, overhead compartments, crew rest facilities, or closets.
- Health and safety regulations prohibit disposing bags of trash on jetbridge.
- Dispose of broken glass by placing in an airsickness bag, or other container, and then placing in trash. Do not place broken glass directly in lavatory or galley trash receptacles.

Turbulence Guidelines

Crew member guidelines:

- Discuss turbulence procedures and use designated turbulence level when communicating turbulence information during all preflight briefings and in flight.
- Flight deck crew should ensure FAs are allotted adequate time to stow service and galley equipment before entering areas of anticipated turbulence.
- For light turbulence, flight deck crew will communicate to Purser/FL via interphone first and follow up with PA to cabin in accordance with Turbulence Action Chart. Flight deck crew will communicate the following via interphone:
 - Estimated time remaining until turbulence is encountered
 - Estimated duration, if known
 - Use proper phraseology (e.g., “light turbulence” not “rough air”)

NOTE: On the A330, flight deck crew does not have “PA All” functionality that prevents PAs from going into crew rest facility. For this reason, flight deck crew will not make any PAs from between the initial greeting, no later than top of climb, and the “prepare the Cabin” PA, 5 minutes prior to top of descent, except as required for emergencies. During preflight briefing, the Captain will coordinate with the Purser to make the “seat belt sign on PA” associated with light turbulence so as not to disturb crew members on rest.

Crew member guidelines: (Continued)

- For moderate turbulence, flight deck crew will communicate to cabin crew via PA first (see Turbulence Action Chart) and then follow up via interphone with the Purser/FL.
Exception: On the A330 during crew rest, flight deck crew will direct Purser/FL to make the moderate turbulence PA. This is to prevent crew rest disruption due to inability to de-select the crew rest facility from flight deck PA system.
- For severe turbulence, flight deck crew will communicate to cabin crew via PA first (see Turbulence Action Chart) and then follow up via interphone with the Purser/FL.
- If conditions become turbulent (moderate or greater) in cabin, FAs should not wait for an announcement to take appropriate action to protect themselves. Follow procedures in Turbulence Action Charts, Flight Attendant Actions section.
- When the flight deck announces to be seated for turbulence, all FAs must immediately adhere to the warning and protect themselves.
- If passengers disregard the seat belt sign, Purser/FL should advise flight deck.
- If seat belt sign has been on for long periods of time without turbulence, Purser/FL should advise flight deck.
- Notify flight deck crew of the turbulence-related injury as soon as safely possible and ask that they send an ACARS Turbulence Report with location/flight level where the injury approximately occurred. Also ask them to include the code "PINJ" in the MISC TEXT section of the turbulence report. Refer to [Turbulence Injury Reporting](#) in section 8.1, **Reporting Procedures** for additional information.
- **767 Safety Seats:** The last two seats in the main cabin on aircraft right are "soft blocked" for FA use in event of unanticipated turbulence while working in aft galley area. These seats will remain open if the flight is not completely full and will be the last seats ACS will assign in the main cabin. FAs should refrain from moving customers and/or jumpseat riders into these seats, if they are unoccupied.

Crew member guidelines: (Continued)

- If moderate to severe turbulence is expected on descent to destination, flight deck crew will notify Purser/FL via interphone of type of turbulence to expect and the need for flight attendants to conduct final cabin checks and be seated for landing as early as possible. The pilots will include the request for flight attendants to be seated earlier in the top of descent PA. If notified of moderate or greater turbulence during descent, flight attendants will complete all Pre-Arrival procedures (**Initial Descent/Top of Descent and Before Landing/10,000 Feet Double Chime**) at the same time and as soon as possible following top of descent PA from flight deck crew.

Turbulence Action Charts

These charts are common to the OBM and FOM. The pilot actions are taken directly from the FOM and are written for pilots. They are included here for flight attendant awareness.

Light Turbulence	
Aircraft Reaction	Slight, erratic changes in altitude and/or attitude.
Cabin Conditions	• Liquids are shaking but not splashing out of cups. • Carts can be maneuvered with little difficulty. • Passengers may feel light strain against seat belts.
Pilot Actions	• Ensure seat belt sign ON. • Via interphone advise Purser/FL of LIGHT turbulence. • Ensure PA reinforcing need for passengers to be seated is made. - Sample PA: <i>Ladies and gentlemen, due to the rough air, please return to your seats and fasten your seat belts.</i>
Flight Attendant Actions	• Continue service with caution. • Use caution serving hot food/beverages. • Visually check passengers seat belts.

Moderate Turbulence	
Aircraft Reaction	Changes in altitude and/or attitude occur but with more intensity than light turbulence. Aircraft remains in control at all times.
Cabin Conditions	• Liquids are splashing out of cups. • Difficult to walk or stand without balancing or holding onto something. • Carts are difficult to maneuver. • Passengers feel definite strain against seat belt.
Pilot Actions	• Ensure seat belt sign in ON. • Make PA directing FAs and passengers to be seated and service to be discontinued. - Sample PA: <i>Ladies and gentlemen, due to the rough air (that we expect in the next ____ minutes) we need you to be seated and check the security your seat belts. We are also requiring all flight attendants to discontinue their service and be seated until it is safe to continue. This is for their safety as well as yours.</i> • Via interphone advise Purser/FL of MODERATE turbulence and expected duration. Exception: On the A330 during crew rest, flight deck crew will direct Purser/FL to make the moderate turbulence PA. This is to prevent crew rest disruption due to inability to de-select the crew rest facility from flight deck PA system. • Advise FAs when it is safe to resume their duties.
Flight Attendant Actions	 Do not wait for guidance from flight deck crew if experiencing moderate turbulence. • Discontinue service and stow all carts. • Stow galley equipment, time and conditions permitting. • FAs secure themselves in jumpseats as soon as possible using seat belt and shoulder harness visually checking passenger seat belts en route to jumpseat. • Purser/FL calls all FA stations to ensure all passengers/crew are seated and contacts flight deck to confirm FAs are seated and carts are stowed. • FAs resume duties once advised by flight deck crew it is safe to do so. • Purser/FL continues communication with flight deck on conditions in the cabin.

Severe Turbulence	
Aircraft Reaction	Large, abrupt changes in altitude and/or attitude. Usually causes large variations in indicated airspeed. Aircraft may be momentarily out of control
Cabin Conditions	• Items are falling over. Unsecured items are tossed about. • Walking is impossible. • Passengers are forced violently against seat belts.
Pilot Actions	• Ensure seat belt sign is ON. • Immediately make PA directing FAs and passengers to be seated and service to be discontinued. - Sample PA: <i>Ladies and gentlemen, due to the rough air, we need you to be seated and check the security of your seat belts. We are also requiring all flight attendants to immediately discontinue their service and be seated until it is safe to continue. This is for their safety as well as yours.</i> • Via interphone advise Purser/FL of SEVERE turbulence and expected duration. • Advise FAs when it is safe to resume duties.
Flight Attendant Actions	 Do not wait for guidance from flight deck crew if experiencing severe turbulence. • Discontinue service immediately and leave carts with brakes engaged until turbulence is reduced. • If possible, place hot liquids on floor. • FAs secure themselves in nearest available seats. - If in jumpseat, use seat belt and shoulder harness. - If a seat is not readily available, you may need to sit on the floor and grab on to the leg of a passenger set or sit on a passenger's lap and ask for passenger assistance. When safe to do so: • Purser/FL calls all FA stations to ensure all passengers/crew are seated and contacts flight deck to relay status of FAs and carts. • Stow all carts and galley equipment. • FAs resume duties once advised by flight deck crew it is safe to do so. • Purser/FL continues communication with flight deck on conditions in the cabin. • Check for damage and injuries; notify flight deck crew of crew/passenger injuries and cabin conditions.



Contact an IFS OCC manager as soon as possible in event of an injury during a layover.

Turbulence Injury Reporting

If an injury occurs due to turbulence, in addition to occupational injury reporting procedures, complete the SkyPro Turbulence Survey to provide critical information about your experience.

To report turbulence-related injury that occurred prior to sterile flight deck:

1. Notify flight deck crew of the turbulence-related injury as soon as safely possible and ask that they send an ACARS Turbulence Report with location/flight level where the injury approximately occurred. Also ask them to include the code "PINJ" in the MISC TEXT section of the turbulence report.
2. Complete the Turbulence Survey on your SkyPro.
3. Complete an SRS/ASAP report.

To report turbulence-related injury that occurred during sterile flight deck:

1. Complete the Turbulence Survey on your SkyPro as close to the time of injury as possible.
2. Notify flight deck crew upon landing, when flight deck is no longer sterile.
3. Complete an SRS/ASAP report.