

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

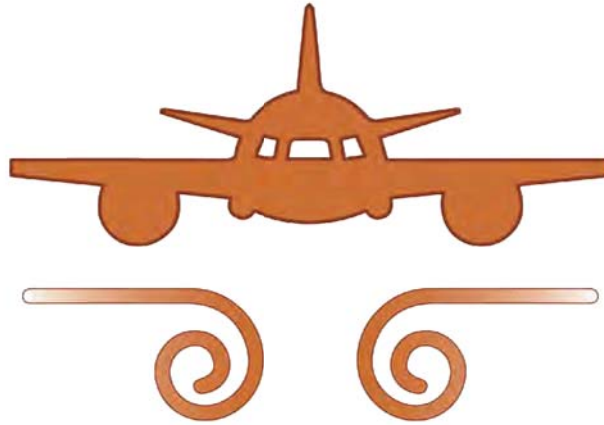
June 12, 2020

Attachment 10 – United Airlines Flight Attendant Operations Manual

[Excerpt]

OPERATIONAL FACTORS

DCA20CA058

5.60 TURBULENCE

Turbulence occurs everyday in our workplace. With preparation and effective two-way communication between flight attendants and pilots, flight attendant turbulence injuries can be minimized.

Common causes of turbulence include adverse weather (thunderstorms), wake turbulence from other aircraft, and jet stream winds. Turbulence intensity can be light, moderate, or severe.

Though the entire aircraft is affected by turbulence, intensity levels may not be the same throughout the cabin
(e.g., turbulence in the forward cabin of an aircraft may be less than that in the aft cabin).

Important: Buckle Up!

Flight attendants must use good judgment, situational awareness and secure themselves when moderate or severe turbulence is experienced regardless of whether the Fasten Seat Belt sign is on or off. Sit on the floor,

in the nearest customer seat or jumpseat. Securely fasten seat belts (and shoulder harnesses, if applicable). Inform the pilots of cabin conditions as soon as advised.

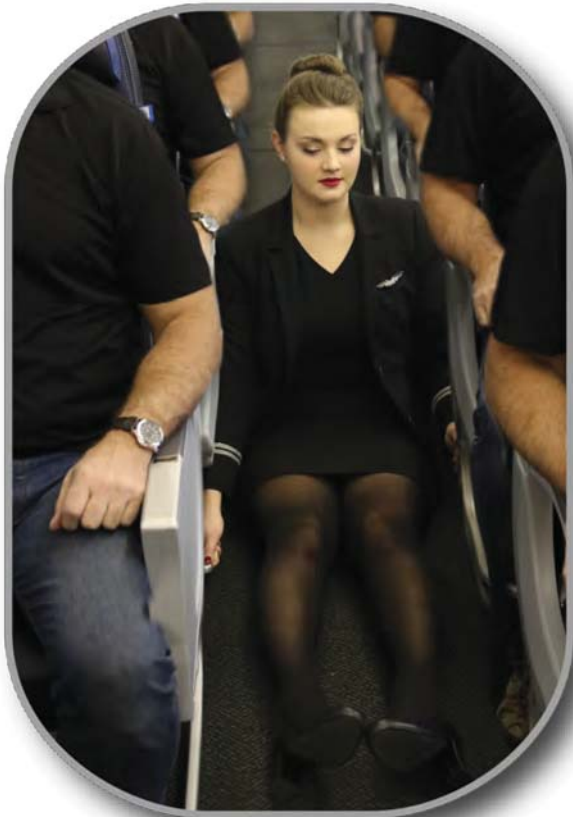
5.60.1 PA ANNOUNCEMENTS... LISTEN AND REACT



“FLIGHT ATTENDANTS, TAKE YOUR JUMPSEATS.”

Flight Attendant Actions

1. Discontinue service and move the carts to a safe location outside of the aisle (e.g., into galley locations, jumpseat-free cross-aisles).
2. Proceed to a jumpseat and ensure seat belts AND shoulder harnesses are securely fastened at all times.
3. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
4. Remain in jumpseat until the pilots make the “Flight attendants, check in” PA announcement.



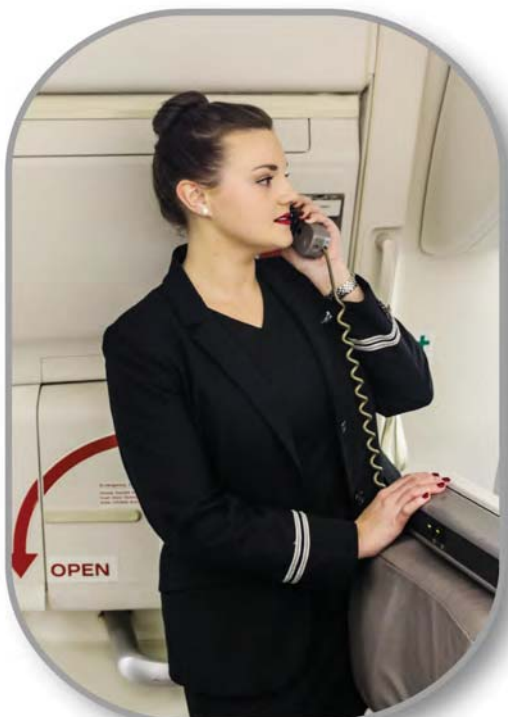
**“FLIGHT ATTENDANTS, BE SEATED
IMMEDIATELY.”
“BE SEATED IMMEDIATELY.”**

Flight Attendant Actions

WARNING:

Do not attempt to walk through the cabin.

1. **Stop**
Stop service (i.e., angle cart into a seat and set cart brake, leave cart within galley and set cart brake).
2. **Drop**
Immediately secure yourself at the nearest available seat (jumpseat, if immediately adjacent; otherwise, take nearest aisle customer seat if one is available). If aisle seat is unavailable, sit on the floor and hold on to a secure stationary object (e.g., seat leg brace).
3. **Hold On**
Remain in jumpseat, with seat belts AND shoulder harnesses securely fastened at all times, or other secure location.
4. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
5. Remain in place until the pilots make either the “Flight attendants, check in” or the “Flight attendants, take your jumpseats” PA announcement.



“FLIGHT ATTENDANTS, CHECK IN.”

Flight Attendant Actions

1. “Flight attendants, check in” PA announcement is the indication that it is safe to resume duties.
2. Check on customers and cabin for any injuries or damages.
3. Proceed to an available jumpseat interphone and check in with the International Purser/Purser, or designee.
4. Report post turbulence findings to International Purser/Purser, or designee.
5. International Purser/Purser checks in with pilots for any further information, as soon as practical.

5.60.2 PREDEPARTURE CREW BRIEFINGS

The captain should include any information about anticipated turbulence in the briefing to the International Purser/Purser. At the captain’s discretion, a review of proper communication procedures from the pilots to the flight attendants may be briefed.

The International Purser/Purser is responsible for ensuring that all flight attendants are provided with all of the information from the captain’s briefing. If turbulence is forecasted, flight attendants must use this information to manage time and service.

Flight attendants must keep the pilots advised of conditions in the cabin throughout the flight.

5.60.3 EXPECTED TURBULENCE

| Definition |
|-------------------------------------------------|
| Advance notice of turbulence has been provided. |

5.60.3.1 PILOT RESPONSIBILITIES

1. Inform the International Purser/Purser.
 - How much time is available before the turbulence is expected.
 - The anticipated intensity and duration of turbulence.
 - Any special instructions (e.g., modifying or curtailing cabin service, securing galley carts, etc.).
 - If necessary, the pilots will seat the flight attendants via the PA announcement "Flight attendants, take your jumpseats".
 - To remind flight attendants to remain in jumpseats until notified otherwise by the pilots. This will be accomplished via the "Flight attendants, check in" PA announcement.

| NOTE: | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <i>The International Purser/Purser must note and accurately communicate with all flight attendants the same information in order to synchronize timing and expectations.</i> | |

2. Turn on the Fasten Seat Belt signs and make a PA announcement informing customers and crew of the anticipated turbulence.

5.60.3.2 FLIGHT ATTENDANT RESPONSIBILITIES

1. Secure service carts and stow service items prior to encountering the expected turbulence, time permitting.
2. When instructed by the pilots via the PA announcement "Flight attendants, take your jumpseats" or at the discretion of the International Purser/Purser (whichever occurs first), sit in a jumpseat as soon as possible with seat belts AND shoulder harnesses securely fastened.
 - Ensure seat belts are fastened while in crew rest area.
3. Remain in jumpseats and ensure seat belts AND shoulder harnesses are securely fastened at all times, until notified by the pilots via the PA announcement "Flight attendants, check in" that it is safe to move about the cabin.
4. Keep customers informed of interruptions or service delays due to turbulence.

5. Notify pilots if customers are not adhering to the fasten seat belt sign.
6. After the pilots advise that it is safe to resume cabin duties via PA announcement “Flight attendants, check in”, perform [post turbulence actions](#).

5.60.4 IMPENDING TURBULENCE

| Definition |
|------------------------------------------|
| Expected moderate or greater turbulence. |

5.60.4.1 PILOT RESPONSIBILITIES

1. Make PA announcement stating:
“Flight attendants, take your jumpseats.”

5.60.4.2 FLIGHT ATTENDANT RESPONSIBILITIES

1. Discontinue service and move the carts to a safe location outside of the aisle (e.g., into galley locations, jumpseat-free cross-aisles).
2. Proceed to a jumpseat and ensure seat belts AND shoulder harnesses are securely fastened at all times.
3. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
4. Remain in jumpseat until the pilots make the “Flight attendants, check in” PA announcement.
5. After the pilots advise that it is safe to resume cabin duties via PA announcement “Flight attendants, check in”, perform [post turbulence actions](#).

5.60.5 UNEXPECTED TURBULENCE

| Definition |
|-------------------------------------------------------------------------------------------------------------------------------|
| Moderate or greater turbulence is encountered unexpectedly. <i>There may not be enough time to safely move to a jumpseat.</i> |

5.60.5.1 PILOT RESPONSIBILITIES

1. Make PA announcement stating:
“Flight attendants, be seated immediately. Be seated immediately.”

5.60.5.2 FLIGHT ATTENDANT RESPONSIBILITIES

WARNING: Do not attempt to walk through the cabin.

1. **Stop**
Stop service (i.e., angle cart into a seat and set cart brake, leave cart within galley and set cart brake).
2. **Drop**
Immediately secure yourself at the nearest available seat (jumpseat, if immediately adjacent; otherwise, take nearest customer seat if one is available). If a seat is unavailable, sit on the floor and hold on to a secure stationary object (e.g., seat leg brace).

NOTE:

If there is nothing secure to hold on to (i.e., in the aisle between United Polaris seats), secure yourself by bracing between the seat walls.

3. **Hold On**
Remain in jumpseats with seat belts AND shoulder harnesses securely fastened at all times, or other secure location until notified by the pilots that it is safe to move about the cabin via either the "Flight attendants, take your jumpseats" or the "Flight attendants, check in" PA announcement.

NOTE:

If a lull in turbulence is encountered and the pilots feel that there is sufficient time to allow flight attendants to move to jumpseats, a PA announcement stating, "Flight attendants, take your jumpseats," will be made. Only at that time, move to a jumpseat.

4. Remain in place until the pilots make the "Flight attendants, check in" PA announcement.
5. If the pilots do not make additional announcements to customers, verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
6. After the pilots advise that it is safe to resume cabin duties via PA announcement "Flight attendants, check in", perform [post turbulence actions](#).

5.60.6 POST TURBULENCE ACTIONS

If the pilots make a PA announcement stating, "**Flight attendants, check in**":

1. After the pilots advise that it is safe to resume cabin duties via PA announcement "Flight attendants, check in":
 - 1) Turn cabin lights to bright.

- 2) Check for customers/crew needing attention or assistance.
- 3) Administer first aid, as necessary.
- 4) Calm and reassure customers.

NOTE:

Notify the pilots and International Purser/Purser immediately of any injuries or damage.

2. Proceed to an available jumpseat interphone and check in with the International Purser/Purser.
3. Report post turbulence findings to International Purser/Purser, or designee.
4. International Purser/Purser checks in with pilots for any further information, as soon as practical.
5. Complete appropriate forms and reports.

5.60.7 TURBULENCE ACTION GUIDE

Turbulence intensity can be light, moderate, or severe.

The following Turbulence Action Guide defines each intensity level along with appropriate pilot and flight attendant actions.

Important: Buckle Up!

Flight attendants must use good judgment, situational awareness and secure themselves when moderate or severe turbulence is experienced regardless of whether the Fasten Seat Belt sign is on or off. Sit on the floor, in the nearest customer seat or jumpseat. Securely fasten seat belts (and shoulder harnesses, if applicable). Inform the pilots of cabin conditions as soon as advised.



5.60.7.1 LIGHT TURBULENCE

5.60.7.1.1 Conditions During Turbulence

- Slight bumpiness and/or erratic changes in altitude/attitude.
- Drinks occasionally splash out of cup.
- Little or no difficulty walking.
- Occupants may feel slight strain against seat belts.

5.60.7.1.2 Pilot Actions

1. Ensure Fasten Seat Belt signs are on.
 2. Via interphone, advise International Purser/Purser of turbulence. Include estimated duration.
 3. Make PA announcement reinforcing the need for customers to be seated or coordinate with the International Purser/Purser to make PA announcement.
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5.60.7.1.3 Flight Attendant Actions

1. Conditions permitting; verify customer seat belts fastened, bassinets unoccupied and continue service with caution.
2. Secure any loose items or carts.
3. Monitor compliance to Fasten Seat Belt signs. Make PA announcements as necessary.
4. If pilots instruct flight attendants to be seated:
 - 1) Take jumpseat.
 - 2) Securely fasten seat belts AND shoulder harnesses.
 - 3) If possible, call International Purser/Purser to confirm when seated.
 - 4) Remain seated until the pilot advises that it is safe to resume duties.
5. International Purser/Purser updates pilots on cabin conditions as required.



5.60.7.2 MODERATE TURBULENCE

5.60.7.2.1 Conditions During Turbulence

- Rapid bumps or jolts.
- Drinks splash out of cup with consistency.
- Standing or walking is sometimes difficult or impossible without holding on to a part of the aircraft.
- Occupants feel definite strain against seat belts.

5.60.7.2.2 Pilot Actions

1. Ensure Fasten Seat Belt signs are on.
2. Via interphone, advise International Purser/Purser of turbulence. Include estimated duration.
3. Make PA announcement reinforcing need for flight attendants and customers to be seated and service to be suspended.

PA Announcements To Flight Attendants

If impending moderate or greater intensity:
"Flight attendants, take your jumpseats."

If unexpected moderate or greater intensity:
"Flight attendants, be seated immediately. Be seated immediately."

5.60.7.2.3 Flight Attendant Actions

PA Announcement 1:

If pilots make the PA announcement “**Flight attendants, take your jumpseats.**”:

1. Discontinue service and move the carts to a safe location outside of the aisle (e.g., into galley locations, jumpseat-free crossaisles).
2. Proceed to a jumpseat and ensure seat belts AND shoulder harnesses are securely fastened at all times.
3. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
4. Remain in jumpseat until the pilots make the “Flight attendants, check in” PA announcement.
5. After the pilots advise that it is safe to resume cabin duties via PA announcement “Flight attendants, check in”:
 - 1) Check for injuries and damage.
 - 2) Stow all carts and galley equipment.
 - 3) Verify and monitor seat belt compliance. Make PA announcements as necessary.
 - 4) International Purser/Purser updates pilots on cabin conditions as required.

PA Announcement 2:

If pilots make the PA announcement “**Flight attendants, be seated immediately. Be seated immediately.**”:

WARNING: Do not attempt to walk through the cabin.

1. **Stop**
Stop service (i.e., angle cart into a seat and set cart brake, leave cart within galley and set cart brake).
2. **Drop**
Immediately secure yourself at the nearest available seat (jumpseat, if immediately adjacent; otherwise, take nearest aisle customer seat if one is available). If aisle seat is unavailable, sit on the floor and hold on to a secure stationary object (e.g., seat leg brace).
3. **Hold On**
Remain in jumpseat, with seat belts AND shoulder harnesses securely fastened at all times, or other secure location.
4. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.

5. Remain in place until the pilots make either the “Flight attendants, check in” or the “Flight attendants, take your jumpseats” PA announcement.
6. After the pilots advise that it is safe to resume cabin duties via PA announcement “Flight attendants, check in”:
 - 1) Check for injuries and damage.
 - 2) Stow all carts and galley equipment.
 - 3) Verify and monitor seat belt compliance. Make PA announcements as necessary.
 - 4) International Purser/Purser updates pilots on cabin conditions as required.



5.60.7.3 SEVERE TURBULENCE

5.60.7.3.1 Conditions During Turbulence

- Large abrupt changes in altitude/attitude.
- In most cases, severe turbulence will be unanticipated.
- Unsecured items are tipped over or tossed about.
- Standing or walking is impossible without holding on to part of the aircraft.
- Occupants are forced violently against seat belts.

5.60.7.3.2 Pilot Actions

1. Ensure Fasten Seat Belt signs are on.
2. Make PA announcement reinforcing need for flight attendants and customers to be seated.

PA Announcement to Flight Attendants

If unexpected moderate or greater intensity:

"Flight attendants, be seated immediately. Be seated immediately."

5.60.7.3.3 Flight Attendant Actions

If pilots make the PA announcement **"Flight attendants, be seated immediately. Be seated immediately."**:

WARNING: Do not attempt to walk through the cabin.

1. **Stop**
Stop service (i.e., angle cart into a seat and set cart brake, leave cart within galley and set cart brake).
2. **Drop**
Immediately secure yourself at the nearest available seat (jumpseat, if immediately adjacent; otherwise, take nearest aisle customer seat if one is available). If aisle seat is unavailable, sit on the floor and hold on to a secure stationary object (e.g., seat leg brace).
3. **Hold On**
Remain in jumpseat, with seat belts AND shoulder harnesses securely fastened at all times, or other secure location.
4. Verbally advise customers to sit down and fasten seat belts. If possible, make PA announcements as necessary.
5. Remain in place until the pilots make either the "Flight attendants, check in" or the "Flight attendants, take your jumpseats" PA announcement.
6. After the pilots advise that it is safe to resume cabin duties via PA announcement "Flight attendants, check in":
 - 1) Check for injuries and damage.
 - 2) Stow all carts and galley equipment.
 - 3) Verify and monitor seat belt compliance. Make PA announcements as necessary.
 - 4) International Purser/Purser updates pilots on cabin conditions as required.