

Docket No. SA-538

Exhibit No. 20-C

NATIONAL TRANSPORTATION SAFETY BOARD

Washington, D.C.

FOM Excerpt – Flight Deck Decorum and Standard Crew Briefings

(6 pages)



02.02.06 FLIGHT DECK DECORUM

02.02.06.01 CREW STANDARDIZATION AND PROFESSIONALISM

Optimal flight crew coordination is a major goal and management objective of the UPS Flight Operations department. It is the responsibility of each crewmember to support this objective.

Standardized procedures promote understanding and effective communications between crewmembers. Standardized procedures and effective communications are significant factors in reducing error in the cockpit and in enhancing safety. All crewmembers must maintain a high level of knowledge/proficiency with all procedures including, but not limited to, standard operating procedures, aircraft limitations, immediate action items, normal and non-normal procedures.

It is mandatory that these standard operating procedures be utilized during all UPS flight operations. These procedures are designed to minimize any potential misunderstandings in cockpit communications and ensure the proper execution of normal and non-normal procedures.

02.02.06.02 CHECKLIST PROCEDURES 14 CFR 121.315

It is UPS policy that crewmembers complete all normal and non-normal checklists as described in the fleet AOMs.

All interior and exterior preflight procedures and the Before Start checklist shall be performed early enough in the preflight sequence to ensure that all equipment is operating properly and to provide maintenance enough time to correct any irregularities which may be found.

Flight Crews will follow normal flow patterns to check and set controls and systems as detailed in the fleet AOM, then call for the appropriate checklist. The Challenge and Response checklist system shall be used, as detailed in each fleet AOM to accomplish all checklists. Checklists are accomplished as a follow-up safety check of actions already performed.

02.02.06.03 FLIGHT DECK ETIQUETTE

The Captain will maintain a business like environment in the cockpit that is conducive to the safe and professional conduct of the flight.

Crewmembers shall ensure that all left over food and trash in the cockpit are disposed of properly before leaving the aircraft.

Defacing company property may result in administrative action. Crew members will not alter or deface the aircraft through the application of unauthorized stickers, pen marks, or photographic material.

02.02.06.04 PORTABLE ELECTRONIC DEVICES (PEDs), MOBILE PHONES AND READING PUBLICATIONS 14 CFR 121.542

The Captain is responsible for ensuring that the use of PEDs, mobile phones and other media does not interfere with the flight crew's ability to perform their duties or introduce unwanted distractions.

Reading publications or material not essential or pertinent to the conduct of the flight by crewmembers occupying a primary crew seat is not permitted at any time. Supplemental crewmembers not occupying a primary crew seat, and jumpseaters, may read in the cockpit during non-critical phases-of-flight. Jumpseaters may read at any time.



NON-COMPLIANCE

Captains report any crewmember or jumpseater not complying with the above directive by completing an "Other/Miscellaneous" Event Report.

PED INTERFERENCE

If PED interference with aircraft systems is suspected or confirmed, in addition to the normal logbook write-up, the Captain will complete an "Other/Miscellaneous" Event Report detailing the event. This applies to possible interference from any source (Company equipment, personal, etc.).

02.02.06.05 STERILE COCKPIT DURING CRITICAL PHASES OF FLIGHT 14 CFR 91.21, 121.542

Critical phases of flight - All ground operations involving pushback, taxi, takeoff and landing, and all other inflight operations below 18,000' (25,000' in Central or South America), except cruise flight.

During critical phases of flight, all cockpit occupants will refrain from any conduct that is not required for the safe operation of the aircraft. It is essential that cockpit occupants maintain a vigilant traffic watch and cockpit distractions are eliminated to the greatest extent possible. The Captain is responsible for maintaining a cockpit environment that prevents distractions and interference with the proper conduct of crewmember duties.

Specific activities prohibited during critical phases of flight:

- Conversation, verbal exchanges and conduct not pertinent to the safe operation of the flight
- Radio calls for non-safety purposes (e.g., departure reports when ACARS is inoperative)
- Eating meals (operating crewmembers)
- Completing paperwork unrelated to the safe operation of flight (e.g., making logbook entries)
- Reading publications not pertinent to the safe conduct of the flight (operating crewmembers)
- Using portable electronic devices or mobile phones

NOTE: If needed, operating crewmembers may use a mobile phone to facilitate communications with Flight Control, prior to takeoff, when the aircraft is stationary (not taxiing). Mobile phones must be OFF for takeoff.

ACARS USAGE IN CRITICAL PHASES OF FLIGHT

Flight Crews

Crewmembers will restrict the use of ACARS below 18,000' to departure reports, weather requests or any other use required for the safe operation of the flight.

Flight Control

Flight Control will attempt to maintain the sterile cockpit philosophy during critical phases of flight. This includes not sending a SELCAL to flights below 18,000'. Since a lag exists in altitude reporting to Flight Control, this requires Dispatchers to use their judgment as to aircraft altitude and pilot workload. Generally, the first 15 minutes after takeoff and the last 15 minutes before landing are conducted below 18,000'. Lido and other ground systems are also programmed to inhibit the automatic sending of material to ACARS during these times.

If it is necessary for Flight Control to send ACARS messages to the flight crew below 18,000', the messages must be "passive" (no SELCAL). The flight crew reads and accepts the message when flight crew duties allow.

Examples of messages Flight Control may send to an aircraft during critical phases of flight include: weight and balance changes, NOTOC changes, security issues and operational changes (e.g., landing destination change, alternate airport change), etc.

**02.02.06.06 VIEW LIMITING DEVICES (RESTRICTIONS)**

No simulated instrument operations under the hood will be permitted except those required for training, under the direction of a Check Airman.

Non-transparent devices are not to be used as sun shades (i.e., newspapers, Jeppesen charts, etc.).

02.02.07 STANDARD CREW BRIEFINGS**02.02.07.01 GENERAL**

All crewmembers will be included in the Departure, Takeoff and Approach briefings. When conducting these briefings, crewmembers shall verbalize the highest threats to each flight segment (i.e., weather, security, terrain, degraded aircraft systems, etc.).

Crew briefings are a critical part of the cockpit communications process. They shall be used to supplement standard operating procedures; aiding each crewmember in understanding exactly what is expected during taxi, takeoff, approach and landing.

It is UPS policy that a briefing be accomplished prior to taxi, takeoff and approach/landing. These briefings are referred to as the CRM/Safety briefing, Takeoff briefing and Approach briefing.

Normal flight crew briefings should not be an extensive verbalization of established procedures. Briefings should be tailored to prepare the flight crew for the execution of the maneuver within the anticipated environment. All briefings should prepare the flight crew for normal and emergency procedures that are unique to the anticipated takeoff, approach or landing. For the first flight with a crew, it may be appropriate to give a detailed briefing covering these procedures (i.e., rejected takeoff or an engine failure during takeoff). Briefings during inclement weather should prepare the flight crew for expected weather conditions to be encountered during the takeoff, approach and landing (e.g., CAT II/III operations or contaminated runway operations).

Briefings will be made while referencing the associated information displayed on cockpit displays [i.e., PFD, ND, CDU, MCP and Flap indicator, as applicable]. Crosschecking these displays during the briefing aids in verifying correct aircraft configuration and correct information has been entered. Sample briefings can be found in each fleet's AOM.

When possible, briefings should be accomplished during times of low workload. The CRM/Safety briefing shall be accomplished prior to engine start. The Takeoff briefing is conducted during taxi-out after the Before Takeoff flow has been accomplished and ATC clearance has been received. Approach briefings will normally be accomplished prior to top-of-descent, if possible.

02.02.07.02 JUMPSEATER BRIEFINGS
14 CFR 91.21, 121.317, 121.571, 121.583

The Captain is responsible for briefing jumpseat occupants on safety subjects such as smoking, seatbelts, emergency exits, oxygen equipment and portable electronic devices.

Additionally, for overwater operations, the Captain will brief all jumpseaters on the location and use of the life preservers (to include a demonstration if requested) and life rafts (if installed). This briefing will be in addition to ensuring they have reviewed this information on the Jumpseat Occupant Safety Briefing Card.



02.02.07.03 CRM/SAFETY BRIEFING

The CRM/Safety briefing serves dual roles; allowing the Captain to set a good CRM tone for the flight and allowing complicated procedures to be discussed in detail prior to engine start when workload and distractions can be minimized. At some airports, the ATC clearance may not be available prior to taxi. At these airports, the anticipated clearance should be thoroughly briefed. The actual ATC clearance must be reviewed during the Takeoff briefing conducted during taxi-out.

The CRM/Safety briefing should be tailored as necessary to fit the needs of the flight crew for the anticipated departure environment.

CRM briefing objectives include the following:

- Setting a good tone in the cockpit to encourage safe and efficient flight crew coordination
- Establishing open lines of communications between all crewmembers, including encouraging the communication of all known threats as soon as they become apparent
- Setting the expectation that standard operating procedures will be followed
- Stimulating good Situational Awareness (SA) and communicating when SA has degraded
- Rejected Takeoff Procedures and Philosophy (Include any safety related issues which may affect the decision to reject such as Weather, MEL deferrals, Windshear etc.)

The CRM/Safety briefing shall also include the following items, as applicable:

- Airport-specific procedures such as engine start and push back procedures, or noise abatement procedures
- Anticipated taxi route, including airport layout and potential areas for confusion (refer to the Pilot Vigilance/Incursion Prevention in this chapter for additional information)

The Pilot Flying (PF) shall brief the following items:

- Anticipated takeoff flap setting
- Anticipated takeoff thrust setting
- Anticipated departure procedure including noise abatement procedures
- Planned use of automation (e.g., FMC, AFDS, etc.)
- A review of anticipated procedures if an emergency occurs during takeoff, including Engine Inoperative Level-Off Altitude and Special Engine Inoperative Departure Procedure (pink page), if applicable
- Terrain avoidance considerations
- Altimetry procedures including transition altitude

**02.02.07.04 TAKEOFF BRIEFING**

Items specific to the intended takeoff will be briefed during taxi after the ATC clearance has been received and the Before Takeoff flow has been completed by both crewmembers. As the items are briefed, the flight crew must verify the correct aircraft configuration. The Captain will ensure the briefing is accomplished during a time of low workload without potential distraction. If necessary to prevent distraction, the briefing will be accomplished while the aircraft is stopped with the parking brake set. The Before Takeoff checklist will be accomplished immediately after the Takeoff briefing is completed.

The Takeoff briefing will include all information relevant to the planned takeoff. At a minimum, the briefing will include the following:

- Takeoff flap setting
- Takeoff thrust setting
- Takeoff runway
- ATC clearance including initial heading/course and altitude
- Transition altitude
- Engine inoperative departure procedure
- Anything that changed since the CRM/Safety briefing was completed

NOTE: For fleet specific Takeoff briefings, refer to fleet AOMs.

NOTE: The fact that certain topics are required to be briefed during the Takeoff briefing does not prevent these same items from being briefed during the CRM/Safety briefing as well. In this case, the Takeoff briefing will serve as a review of those items.

Briefing specific items and verifying the aircraft is correctly configured while taxiing will clarify and reinforce the expected takeoff procedures.