

# Instruction Nº 23/DSV/2015

SUBJECT: PASSENGER SAFETY INFORMATION BRIEFING AND BRIEFING CARDS

DATE: 24/09/2015

## 1. PURPOSE

1.1.1 This instruction provides information regarding the items that are required to be, or should be, covered in oral passenger briefings and on passenger briefing cards. This instruction provides specific information about Commercial Air Transport Operators engaged in passenger-carrying operations conducted under CV-CAR 9. It also provides suggestions about making this information interesting and meaningful.

## 2. BACKGROUND

2.1.1 An alert, knowledgeable person has a much better chance of surviving any life or injury-threatening situation which could occur during passenger carrying operations in civil aviation. Therefore, the Civil Aviation Authority requires a passenger information system for Cabo Verde air operators which includes both oral briefings and briefing cards. It would be desirable to have every passenger highly motivated; however, motivating people, even when their own personal safety is involved, is not easy. One way to increase passenger motivation is to make the safety information briefings as interesting and attractive as possible. This instruction encourages individual operators to be innovative in their approach in imparting such information.

## 3. OPERATIONS WITH FLIGHT ATTENDANTS

- 3.1.1 This section discusses the passenger briefing and information cards for operations conducted under CV-CAR 9 where flight attendants are present.
- 3.1.2 Oral Briefings. The pre-takeoff oral briefing should be given so that each passengers can clearly hear it and easily see the required demonstrations. Crewmembers giving these briefings should speak slowly and distinctly. When there is only one flight attendant, the flight attendant should be located so that passengers can see the required oxygen demonstration and, if applicable to the flight, demonstrations of equipment and procedures to be used in an emergency situation during extended overwater operations. When more than one crewmember gives the briefings and demonstrations, cabin attendants should be evenly distributed throughout the passenger cabin. For example, when there are only two flight attendants, one flight attendant should give the briefing by using the aft public address system (if one is available) while the other flight attendant gives the demonstration at the front of the aircraft. This will ensure that passengers see the demonstration. Crewmembers giving the demonstrations should coordinate them with the applicable information given in the oral briefing, be animated, and make eye contact with as many passengers as possible. The pretakeoff oral briefing may be given by audiotape or videotape means. This method of passenger briefing should be considered when the aircraft is equipped with the necessary videotape and sound equipment. The advantage of audiotape or videotape presentations is the assurance

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that a complete briefing is given that the diction is good, and that an overall high quality of briefing is maintained. A tape presentation also lends themselfs very well to a multilingual presentation. In addition, a videotape presentation "signing" for the deaf and other visual presentations, which may be more meaningful to passengers. Airlines using video presentations should have procedures to ensure that screens used during these presentations, which extend into the aisles, are properly stowed pror to movement on the surface, takeoff, and landing. Screens located at passenger seats that could impede rapid passenger egress also should be stowed properly prior to movement on the surface, takeoff, or landing. When a videotape briefing is used, flight attendants should be evenly distributed, close to their assigned flight attendant seats. In addition, operators should have alternative briefing procedures to follow if the videotape or audiotape presentation becomes inoperative:

- (1) Pre-takeoff. Before each takeoff, the operator must ensure that all passengers are orally briefed on each of the following:
  - (a) **Compliance with Signs and Placards**. The briefing must include a statement that CV-CARs require passenger compliance with the lighted passenger information signs, posted placards, and instructions of crewmembers;
  - (b) **Smoking.** The briefing must also include when, where, and under what conditions smoking is prohibited. The briefing must also state that smoking is prohibited in the lavatories and other designated non-smoking areas and that tampering with, destroying, or disabling smoke detectors in the lavatories are prohibited by Aviation Law;
  - (c) Seatbelts. Crewmembers should brief passengers on the method of fastening, tightening, and unfastening seatbelts. They also should brief passengers that seatbelts should be worn low and tight. Passengers must also be informed that their seatbelts should be fastened any time the seatbelt sign is illuminated and should be fastened anytime they are seated. In addition, passengers must be informed that they must obey the instructions of the flight attendants regarding the "fasten seatbelt" signs;
  - (d) **Exits**. Crewmembers must brief passengers on the location of emergency exits. They should also brief passengers as clearly as possible on any additional information about the exits and physically point them out;
  - (e) **Flotation Equipment.** Crewmembers must brief passengers on the type, location, and use of required flotation equipment. This briefing must include the type of equipment available at the individual passenger's seat and the method of use in the water, such as putting the arms through the straps and resting the torso on the cushion When the aircraft is equipped with life preservers, the briefing must include instructions about the location and removal of life preservers from stowage areas, including pouches, and the donning and inflation of the life preservers. If the aircraft is equipped with both flotation cushions and life preservers, flight attendants should brief passengers on both types of equipment and must brief passengers on the required flotation equipment:
  - (f) Passengers Needing Assistance. Crewmembers shall individually brief a passenger who may need assistance in moving expeditiously to an exit. If the person is accompanied by an attendant, the attendant must also be briefed. The briefing must include information about the most appropriate route to an exit and the most appropriate time to start moving toward that exit. There must also be an inquiry about the most appropriate manner of assisting the person;
  - (g) **Floor Proximity Emergency Lighting.** Crewmembers should inform passengers that emergency lights are located on or near the floor of the aircraft;

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- (h) Oxygen Equipment. Before reaching 25,000 feet, crewmembers must demonstrate the use of oxygen equipment, including locating, donning, and adjusting the equipment; any action which might be necessary to start the flow of oxygen; and the prohibition against smoking during oxygen use. Passengers should also be given instructions regarding the automatic appearance of the oxygen mask. In addition, passengers should be advised to don their own oxygen masks before assisting children with their masks. The announcement should include the information that oxygen mask reservoir bags may not inflate although sufficient oxygen is flowing into the bag;
- (i) **Supplemental Information**. Passengers should be briefed regarding passenger briefing cards and additional safety actions. Passengers should be told the following:
  - (i) The location of the cards and the fact that they contain additional safety information, which the passengers should read.
  - (ii) The briefing should also contain instructions regarding passenger compliance with the following pre-takeoff requirements: proper stowage of each passenger's carry-on baggage; positioning of each passenger's seat back to the upright position; securing each passenger's food and beverage tray in its stowed position; and stowing of any food, beverage or tableware;
- (j) Extended Overwater Operations. If the flight involves extended overwater operations, crewmembers must brief passengers before the overwater portion of the flight begins. This briefing must be given before takeoff if the flight proceeds directly over water. It should include:
  - (i) **Exits**. Crewmembers should instruct passengers on the most appropriate exits for their use:
  - (ii) Life Preservers. Crewmembers must point out the stowage locations of life preservers and demonstrate their removal from stowage, extraction from pouches, donning, and their use, including manual and oral inflation methods, instructions on when the equipment should be inflated, and manual operation of survivor locator lights and accessories. If there are significant differences in the donning or operation of life preservers at various seats, passengers should be briefed only on the characteristics of the life preserver located at the individual passenger's seat. It is suggested that flight attendants individually brief parents or guardians accompanying small children on the use of life preservers as it applies to these children;
  - (iii) **Liferafts and Slide/Rafts.** Crewmembers must instruct passengers on liferaft and slide/raft retrieval from stowage, and their preparation for use.

## (2) Post Takeoff:

- (a) Seatbelts. Immediately before or after the "seatbelt" sign is turned off, an announcement must be made that passengers should keep their seatbelts fastened while seated even if the "seatbelt" sign is turned off. The possibility of encountering unexpected turbulence should be emphasized to passengers;
- (b) Information Signs. A crewmember should remind passengers to be seated anytime the "seatbelt" sign is illuminated; this is especially true when passengers are seated without

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their seatbelts fastened. Many times, one announcement is not enough; therefore, repeated announcements may be necessary, especially when flying through turbulent air.

- (3) **Pre-landing.** The pre-landing briefing is recommended and should include the following: seatbelts must be securely fastened, smoking materials must be extinguished, tray tables must be secured in their stowed position, and seat backs must be in a fully upright position food, beverages, or tableware must be picked up, and carry-on baggage and movie/video screens must be properly stowed for landing;
- (4) Post Landing. The postlanding briefing is recommended. Crewmembers should advise passengers to remain seated with seatbelts fastened until the "seatbelt" sign has been turned off. This announcement should be accompanied by an explanation that this is for their own safety and the safety of those seated around them. Passengers should also be reminded concerning prohibitions against smoking. In addition, they should be reminded to use caution when opening the overhead bins;
- (5) **Crewmember Procedures.** Each oral briefing provided by an air operator for its passengers must be explained and described in the appropriate manuals. The manuals should also contain a description of crewmember tasks and coordination procedures to ensure passenger compliance with information signs and crewmember safety instructions. This description should include the stipulation that cabin crew should notify the pilot-incommand anytime a passenger is not complying with safety instructions. Cabin crew should neither be assigned nor perform nonsafety related duties during the safety briefings if those duties could obstruct the view of the passengers or distract them from listening:
- 3.1.3 Passenger Safety Briefing Cards. Oral briefings must be supplemented with briefing cards, which must be pertinent only to that type and model of aircraft and consistent with the airline's procedures. The information on the cards should be consistent with the information contained in the air carrier's manuals. When aeroplane equipment is substantially different, even within the same model of aeroplane, the operator should provide information cards specific to that aircraft. Merely labelling exits or other equipment with the aircraft type and model of aircraft is not sufficient. Cards must show the most common methods used to operate the emergency exits in an emergency situations. They must also show other instructions necessary for the use of emergency equipment:
  - (a) Design and Location. The passenger safety briefing card must be designed and located so that the seated passenger will be able to see and have access to the card when it is placed in its normal location aboard the aircraft. The passenger briefing card should be large enough so that when placed in its normal location aboard the aircraft, the passenger seated for taxi, takeoff, and landing will be able to visually locate and identify the card. It should not be possible for the card, when it is in its normal location, to slip out of the sight of the passenger. The card should have an eye-catching title or symbol identifying itself as safety or emergency instructions. The mode of presentation should be diagrammatic or pictorial, making written information, to the extent possible, unnecessary. The information on the card must apply to only the type and model of aircraft on which it is used. The method used to depict equipment and actions can be pictures of people, diagrams, drawings, words, or combinations of these. The use of international symbols is encouraged. All depictions should be easy to understand and not be complex. Cards should also be interesting and attractive so passengers will want to read them. For example, a multicoloured card which has pictures and drawings will be picked up and read more often than a black and white printed card;

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- (b) **Extraneous Information.** Passenger safety briefing cards should contain only information that is essential for safety. For example, advertising, schedules, or promotional information is not safety related and should not be on the cards.
- (c) **Content.** Safety briefing cards that provide information to passengers should include:
  - (i) Passenger Compliance with Safety Information. The instructions on the cards should advise passengers that they must comply with safety instructions including signs, placards, and instructions of crewmembers. The importance of complying with the seatbelt sign should be emphasized;
  - (ii) **Smoking.** The cards should inform passengers that smoking is prohibited in the lavatories or other designated nonsmoking areas, during takeoff and landing, anytime the "no smoking" sign is illuminated, or when in the immediate vicinity of passenger s using oxygen:
  - (iii) **Seatbelts.** The cards should have instructions for fastening, tightening, and unfastening seatbelts;
  - (iv) **Floor Proximity Emergency Lighting.** The cards should inform passengers that emergency lights are located on or in the vicinity of the floor of the aeroplane;
  - (v) Exit Seating. The following information may be on separate cards located at the exit seat or it may be on each passenger information card. The important part of the requirement is that the information must be available at the exit seat. The information regarding exit seating must be printed on the card in the languages in which briefings and oral commands are given by the crew. Information on the criteria and functions applicable to a passenger occupying an exit seat must be listed on the card. In addition, the passenger information card must contain a request in the language used by the operator that a passenger identify himself or herself to allow reseating if he or she cannot meet the selection criteria; has a nondiscernible condition that will prevent him or her from performing the functions listed above; may suffer bodily harm as the result of performing one or more of those functions; or does not wish to perform those functions.
  - (vi) **Exit Location.** The cards must give the location of every available exit in the cabin. The cards should encourage passengers to familiarise themselves with the location of exits other than the one they entered;
  - (vii) Exit Operations. The cards must contain diagrams depicting the emergency opening of each exit type. Any manual operations necessary to successfully complete an evacuation such as manual inflation of the evacuation slide, operation of the stairs, or the recommended placement of the hatch on the seat or outside the aeroplane should also be included. The procedures for the placement of the hatch should be consistent with the procedures used during the aircraft evacuation demonstration conducted for that aircraft certification. Showing more than one method of opening a door could be confusing. Past experience has indicated that confusion is sometimes created by a diagram or picture that demonstrates operation of an exit peculiar to only one side of the aeroplane. If, for instance, all the emergency door handles rotate toward the rear of the aircraft, this could be explained on the cards. The cards could show that the handles need to be rotated in the direction of the arrow.:
  - (viii) **Evacuation Slide Use.** The cards must contain instructions for passengers to exit the aircraft and use the slide or other assist means in a manner consistent with the exits on that aircraft.:

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- (ix) Overwing Exit Use. The cards must contain instructions illustrating the proper method of egressing through an overwing exit. The cards should also contain instructions for passengers to walk or run on any ramp that leads from an exit, and the direction and route of escape after leaving all overwing exits should be included. The procedure for placement of the window exit plug should be consistent with the procedure used during the operator's evacuation demonstration for that aircraft's operating certificate;
- (x) **Carry-On Baggage.** The cards should inform passengers that in an emergency situation, they should not bring carry-on baggage to the exit.
- (xi) **Brace Position.** The cards should contain information about protective brace positions to be assumed by passengers, including children, in all seat orientations (i.e., forward, aft, and side facing) and all seat spacing for that aeroplane. Information about these brace positions is contained in Annex A.;
- (xii) Individual Flotation Equipment. The cards must depict the stowage location and contain instructions concerning removal of the devices from their stowage locations, extraction from the stowage pouches or packages, manual and oral inflation backup systems, its use in the water, and the manual operation of survivor locator lights and accessories, as appropriate;. The cards should depict the method of fitting adult life preservers on small children. It is suggested that if the airline supplies child flotation devices, the donning and method of inflation of these devices be depicted on the cards.
- (xiii) **Oxygen Mask.** The cards should contain instructions on the location, donning, and means for adjusting oxygen masks; any further actions needed to start the flow of oxygen; and instructions to passengers to don their own oxygen mask before assisting children with their masks;
- (xiv) **Portable Electronic Devices.** The cards should inform passengers of permissible times, conditions, and limitations when various portable electronic devices may be used.
- (xv) Supplemental Information. The cards may contain supplemental instructions. For example, for takeoff and landing, carry-on baggage and tray tables must be properly stowed, galley service items must be collected from passengers and stowed, and seat backs must be placed in their fully upright position;
- (xvi) Extended Overwater Operations. When liferafts are required to be carried in extended overwater operations, the cards should depict liferaft and slide/raft stowage, launching, and securing locations. The cards also should contain instructions for passengers concerning preparation for use, inflation methods, and the means for securing rafts to the aircraft.

# 4. OPERATIONS WITHOUT FLIGHT ATTENDANTS

- 4.1.1 This section discusses the passenger briefing and information cards for operations conducted under CV-CAR 9 where flight attendants are present.
- 4.1.2 Oral Briefings. The pre-takeoff oral briefing should be given so that each passengers can clearly hear it and easily see the required demonstrations. Crewmembers giving these briefings

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should speak slowly and distinctly. The pre-takeoff oral briefing may be given by audiotape or videotape means. This method of passenger briefing should be considered when the aircraft is equipped with the necessary videotape and sound equipment. The advantage of audiotape and videotape presentations is the assurance that a complete briefing is given that the diction is good, and that an overall high quality of briefing is maintained. A tape presentation also lends themselfs very well to a multilingual presentation. In addition, a videotape presentation can include "signing" for the deaf and other visual presentations, which may be more meaningful to passengers. Airlines using video presentations must have procedures to ensure that screens used during these presentations, which extend into the aisles, are properly stowed prior to movement on the surface, takeoff, and landing. Screens located at passenger seats that could impede rapid passenger egress also should be stowed properly prior to movement on the surface, takeoff, or landing. In addition, operators should have alternative briefing procedures to follow if the videotape or audiotape presentation becomes inoperative:

- (1) Pre-takeoff. Before each takeoff, the operator must ensure that all passengers are orally briefed on each of the following:
  - (a) **Compliance with Signs and Placards**. The briefing must include a statement that CV-CARs require passenger compliance with the lighted passenger information signs(if installed) and, posted placards, and instructions of crewmembers:
  - (b) **Smoking.** The briefing must also include when, where, and under what conditions smoking is prohibited. The briefing must also state that smoking is prohibited in the lavatories and other designated non-smoking areas and that tampering with, destroying, or disabling smoke detectors in the lavatories are prohibited by Aviation Law;
  - (c) Seatbelts. Crewmembers must brief passengers on the method of fastening, tightening, and unfastening seatbelts and that seatbelts should be worn low and tight. Passengers must also be informed that their seatbelts should be fastened any time the seatbelt sign is illuminated (if installed) and should be fastened anytime they are seated. In addition, passengers must be informed that they must obey the instructions of the flight attendants regarding the use of seatbelts;
  - (d) **Seat Backs.** Crewmembers must brief passengers regarding the need to have their seat backs in an upright position before takeoff and landing.
  - (e) **Exits**. Crewmembers must brief passengers on the location of emergency exits. They should also brief passengers as clearly as possible on any additional information about the exits and physically point them out. The passengers seated nearest to a door or exit should be individually briefed on the operation of that door or exit.
  - (f) **Survival Equipment.** Crewmembers must include in these briefings information about the location of survival equipment.
  - (g) **Fire Extinguisher.** Crewmembers must brief passengers on the location and use of fire extinguishers.
  - (h) **Flotation Equipment.** Crewmembers must brief passengers on the type, location, and use of required flotation equipment. This briefing must include the type of equipment available at the individual passenger's seat and the method of use in the water, such as putting the arms through the straps and resting the torso on the cushion When the aircraft is equipped with life preservers, the briefing must include instructions about the location and removal of life preservers from stowage areas, including pouches, and the donning and inflation of the life preservers. If the aircraft is equipped with both flotation

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- cushions and life preservers, crewmembers must brief passengers on both types of equipment;
- (i) Passengers Needing Assistance. Crewmembers shall individually brief a passenger who may need assistance in moving expeditiously to an exit. If the person is accompanied by an attendant, the attendant must also be briefed. The briefing must include information about the most appropriate route to an exit and the most appropriate time to start moving toward that exit. There must also be an inquiry about the most appropriate manner of assisting the person;
- (j) **Floor Proximity Emergency Lighting.** Crewmembers should inform passengers that emergency lights are located on or near the floor of the aircraft;
- (k) Oxygen Equipment. If the flights involves operations above 12,000 ft MSL, crewmembers must brief passengers on the normal and emergency use of oxygen equipment. These instructions should include donning, and adjusting the equipment; any action which might be necessary to start the flow of oxygen; and the prohibition against smoking during oxygen use. In addition, passengers should be advised to don their own oxygen masks before assisting children with their masks. The announcement should include the information that oxygen mask reservoir bags may not inflate although sufficient oxygen is flowing into the bag;
- (I) **Supplemental Information**. Passengers should be briefed regarding passenger briefing cards and additional safety actions. Passengers should be told the following:
  - (i) The location of the cards and the fact that they contain additional safety information, which the passengers should read.
  - (ii) The briefing should also contain instructions regarding passenger compliance with the following pre-takeoff requirements: proper stowage of each passenger's carry-on baggage; securing each passenger's food and beverage tray in its stowed position; and collecting of any food, beverage or tableware;
- (m) **Extended Overwater Operations**. If the flight involves extended overwater operations, crewmembers must brief passengers before the overwater portion of the flight begins. This briefing must be given before takeoff if the flight proceeds directly over water. It should include:
  - (i) **Exits**. Crewmembers should instruct passengers on the most appropriate exits for their use;
  - (ii) **Life Preservers.** Crewmembers must point out the stowage locations of life preservers and demonstrate their removal from stowage, extraction from pouches, donning, and their use, including manual and oral inflation methods, instructions on when the equipment should be inflated, and manual operation of survivor locator lights and accessories. If there are significant differences in the donning or operation of life preservers at various seats, passengers should be briefed only on the characteristics of the life preserver located at that passenger's seat. It is suggested that flight attendants individually brief parents or guardians accompanying small children on the use of life preservers as it applies to these children;
  - (iii) **Liferafts and Slide/Rafts.** Crewmembers must instruct passengers on liferaft and slide/raft retrieval from stowage, and their preparation for use.

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(iv)Information on Cards. Crewmembers should emphasize that review of the passenger information cards is important.

# (2) Post Takeoff:

- (a) Seatbelts. If a "seatbelt" sign is installed, then Immediately before or after the "seatbelt" sign is turned off, an announcement must be made that passengers should keep their seatbelts fastened while seated even if the "seatbelt" sign is turned off. If there is no "seatbelt" sign installed, then crewmembers should inform passengers as soon as possible after takeoff that they should keep their seatbelts fastened. The possibility of encountering unexpected turbulence should be emphasized to passengers;
- (3) **Pre-landing.** The pre-landing briefing is recommended and should include the following: seatbelts must be securely fastened, smoking materials must be extinguished, tray tables tables (if the aircraft is so equipped) must be secured in their stowed position, and seat backs must be in a fully upright position food, beverages, or tableware must be picked up, and carry-on baggage and movie/video screens must be properly stowed for landing;
- (4) Post Landing. The postlanding briefing is recommended. Crewmembers should advise passengers to remain seated with seatbelts fastened until the "seatbelt" sign has been turned off. This announcement should be accompanied by an explanation that this is for their own safety and the safety of those seated around them. Passengers should also be reminded concerning prohibitions against smoking. In addition, they should be reminded to use caution when opening carry-on baggage stowage area doors, including the overhead bins;
- (5) **Crewmember Procedures.** Each oral briefing provided by an air operator for its passengers must be explained and described in the appropriate manuals. The manuals should also contain a description of crewmember tasks and coordination procedures to ensure passenger compliance with information signs and crewmember safety instructions.
- 4.1.3 Passenger Safety Briefing Cards. Oral briefings must be supplemented with briefing cards, which must be pertinent only to that type and model of aircraft and consistent with the airline's procedures. The information on the cards should be consistent with the information contained in the air carrier's manuals. When aeroplane equipment is substantially different, even within the same model of aeroplane, the operator should provide information cards specific to that aircraft. Merely labelling exits or other equipment with the aircraft type and model of aircraft is not sufficient. Cards must show the most common methods used to operate the emergency exits in an emergency situations. They must also show other instructions necessary for the use of emergency equipment:
  - (a) **Design and Location.** The passenger safety briefing card must be designed and located so that the seated passenger will be able to see and have access to the card when it is placed in its normal location aboard the aircraft. The passenger briefing card should be large enough so that when placed in its normal location aboard the aircraft, the passenger seated for taxi, takeoff, and landing will be able to visually locate and identify the card. It should not be possible for the card, when it is in its normal location, to slip out of the sight of the passenger. The card should have an eye-catching title or symbol identifying itself as safety or emergency instructions. The mode of presentation should be diagrammatic or pictorial, making written information, to the extent possible, unnecessary. The information on the card must apply to only the type and model of aircraft on which it is used. The method used to depict equipment and actions can be pictures of people, diagrams, drawings, words, or combinations of these. The use of

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international symbols is encouraged. All depictions should be easy to understand and not be complex. Cards should also be interesting and attractive so passengers will want to read them. For example, a multicoloured card which has pictures and drawings will be picked up and read more often than a black and white printed card;

- (b) **Extraneous Information.** Passenger safety briefing cards should contain only information that is essential for safety. For example, advertising, schedules, or promotional information is not safety related and should not be on the cards.
- (c) **Content.** Safety briefing cards that provide information to passengers should include:
  - (i) Passenger Compliance with Safety Information. The instructions on the cards should advise passengers that they must comply with safety instructions including signs, placards, and instructions of crewmembers. The importance of complying with the seatbelt sign should be emphasized;
  - (ii) Smoking. The cards should inform passengers that smoking is prohibited in the lavatories or other designated nonsmoking areas, during takeoff and landing, anytime the "no smoking" sign is illuminated, or when in the immediate vicinity of passenger s using oxygen;
  - (iii) **Seatbelts.** The cards should have instructions for fastening, tightening, and unfastening seatbelts;
  - (iv) **Seat Backs.** The cards should provide instructions to passengers that their seat backs should be in the upright position for takeoff and landing.
  - (v) **Floor Proximity Emergency Lighting.** The cards should inform passengers that emergency lights are located on or in the vicinity of the floor of the aeroplane;
  - (vi)Exit Seating. The following information may be on separate cards located at the exit seat or it may be on each passenger information card. The important part of the requirement is that the information must be available at the exit seat. The information regarding exit seating must be printed on the card in the languages in which briefings and oral commands are given by the crew. Information on the criteria and functions applicable to a passenger occupying an exit seat must be listed on the card. In addition, the passenger information card must contain a request in the language used by the operator that a passenger identify himself or herself to allow reseating if he or she cannot meet the selection criteria; has a nondiscernible condition that will prevent him or her from performing the functions listed above; may suffer bodily harm as the result of performing one or more of those functions; or does not wish to perform those functions.
  - (vii) **Exit Location.** The cards must give the location of every available exit in the cabin. The cards should encourage passengers to familiarise themselves with the location of exits other than the one they entered;
  - (viii) **Exit Operations.** The cards must contain diagrams depicting the emergency opening of each exit type. Any manual operations necessary to successfully complete an evacuation such as manual inflation of the evacuation slide, operation of the stairs, or the recommended placement of the hatch on the seat or outside the aeroplane should also be included. The procedures for the placement of the hatch should be consistent with the procedures used during the aircraft evacuation demonstration conducted for that aircraft certification. Showing more than one method of opening a door could be confusing. Past experience has indicated that

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- confusion is sometimes created by a diagram or picture that demonstrates operation of an exit peculiar to only one side of the aeroplane. If, for instance, all the emergency door handles rotate toward the rear of the aircraft, this could be explained on the cards. The cards could show that the handles need to be rotated in the direction of the arrow.:
- (ix) **Evacuation Slide Use.** The cards must contain instructions for passengers to exit the aircraft and use the slide or other assist means in a manner consistent with the exits on that aircraft.:
- (x) Overwing Exit Use. The cards must contain instructions illustrating the proper method of egressing through an overwing exit. The cards should also contain instructions for passengers to walk or run on any ramp that leads from an exit, and the direction and route of escape after leaving all overwing exits should be included. The procedure for placement of the window exit plug should be consistent with the procedure used during the operator's evacuation demonstration for that aircraft's operating certificate;
- (xi) **Carry-On Baggage.** The cards should inform passengers that in an emergency situation, they should not bring carry-on baggage to the exit.
- (xii) **Brace Position.** The cards should contain information about protective brace positions to be assumed by passengers, including children, in all seat orientations (i.e., forward, aft, and side facing) and all seat spacing for that aeroplane. Information about these brace positions is contained in Annex A.;
- (xiii) **Location of Survival Equipment.** The cards must provide information about the location of survival equipment. This is best done by using diagrams.
- (xiv) Location and Use of Fire Extinguishers. The cards must depict the location of fire extinguishers. In addition, they must provide information regarding the use of fire extinguishers.
- (xv) Individual Flotation Equipment. The cards must depict the stowage location and contain instructions concerning removal of the devices from their stowage locations, extraction from the stowage pouches or packages, manual and oral inflation backup systems, its use in the water, and the manual operation of survivor locator lights and accessories, as appropriate;. The cards should depict the method of fitting adult life preservers on small children. It is suggested that if the airline supplies child flotation devices, the donning and method of inflation of these devices be depicted on the cards.
- (xvi) Oxygen Mask. The cards should contain instructions on the location, donning, and means for adjusting oxygen masks; any further actions needed to start the flow of oxygen; and instructions to passengers to don their own oxygen mask before assisting children with their masks;
- (xvii) **Portable Electronic Devices.** The cards should inform passengers of permissible times, conditions, and limitations when various portable electronic devices may be used.
- (xviii) Seat Backs. The card should provide information that seat backs must be placed in the full upright position before takeoff and landing.

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- (xix) Supplemental Information. The cards may contain supplemental instructions. For example, for takeoff and landing, carry-on baggage and tray tables must be properly stowed, galley service items must be collected from passengers and stowed;
- (xx) Extended Overwater Operations. When liferafts are required to be carried in extended overwater operations, the cards should depict liferaft and slide/raft stowage, launching, and securing locations. The cards also should contain instructions for passengers concerning preparation for use, inflation methods, and the means for securing rafts to the aircraft.

João dos Reis Monteiro President of the Board

AGENCIA DE AVIA

#### ANNEX A - BRACE FOR IMPACT POSITION

## 1. INTRODUCTION

A. In order to establish a best brace for impact position for each person, it would be necessary to know the size and physical limitations of the individual, the seating configuration, the type of emergency, and many other factors.

## 2. REASONS FOR BRACING FOR IMPACT

- A. There are two primary reasons for bracing for impact. One is to reduce flailing and the other is to reduce secondary impact. Secondary impact can be reduced by pre-positioning the body (particularly the head) against the surface it would strike during impact. Failing can be reduced by having the occupant flex, bend, or lean forward over their legs in some manner.
- B. Aircraft being utilised today may have seating arrangements that result in very small seat pitches (the space between rows of seats) or may have a combination of small and large seat pitch spacing (that is, an aircraft with a first class/coach seating arrangement).

#### 3. PASSENGER POSITIONS

- A. Passengers should take a brace position in one of several ways and, in all cases, the seatbelt should be worn as tight as possible and as low on the torso as possible.
  - (1) In aircraft with low-density seating or seats spaced relatively far apart, passengers should, as depicted in Figures 2 or 3, rest their heads and chests against their legs. Flailing can be reduced by having the passengers grasp their ankles or legs, as depicted in Figure 2, or if they are unable to do that, they should wrap their arms under their legs, as depicted in Figure 3, Their heads should be face down in their laps and not turned to one side.
  - (2) In aircraft with high-density seating or in cases where passengers are physically limited and are unable to place their heads in their laps, they should position their heads and arms against the seat (or bulkhead) in front of them, as depicted in Figure 1,.
  - (3) Passengers in aft facing seats should rest their heads on the seat back (or bulkhead) behind them as depicted in Figure 5. The passengers should not place their hands in back of their heads, as has been recommended in the past, instead, they should either place their hands in their laps or grasp the side of their seats.
  - (4) The passengers' feet should be placed flat on the floor and slightly in front of the edge of the seat.
  - (5) Passengers should not use pillows or blankets between their bodies and the object they are bracing against (either a seat back or their own body). Pillows and blankets provide little, if any, energy absorption and increase the possibility of secondary impact injury. Also, pillows and blankets could create additional clutter in the aisles, which could be a detriment in an emergency evacuation.
  - (6) Children which are occupying approved child restraint devices should be braced in accordance with the manufacturer's instructions. Children in passenger seats should utilise the same brace position as adults. Adults holding infants should provide as uniform support

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- as possible to the infant's head, neck, and body and lean over the infant to minimise the possibility of injury due to flailing.
- (7) Pregnant or handicapped passengers may or may not need the assistance of another person in taking a brace position but should, in general, attempt to take the same brace position as the other passengers. If aft facing passenger seats are available, these passengers may benefit from being relocated to those seats.

#### 4. CABIN CREW MEMBERS POSITIONS

- B. The brace positions for cabin crew will depend on the direction their seats face and type of restraint system those seats are equipped with.
  - (1) In forward facing seats equipped with an inertial reel shoulder harness, the cabin crew should sit back in the seat as depicted in Figure 5 and rest their chins on their sternums as depicted in Figure 4. If the seats are equipped with non-inertial reel-type shoulder harnesses, the cabin crew should fasten their shoulder harnesses as tight as possible, lean against them, and rest their chins on their sternums as depicted in Figure 4. The cabin crew's arm and hands should be positioned in their laps or holding onto the side of their seats but should not be holding onto their restraint systems.
  - (2) In rear facing cabin crew seats, the cabin crew should sit back in their seats, rest their heads against their seat backs or headrests, and have the restraint systems, either inertial or noninertial type, as tight as possible as depicted in Figure 5. Their hands should not be clasped behind their heads, but may be positioned as in a forward facing seat.

#### 5. OTHER SITUATIONS

- C. Helicopter "brace for impact" positions are the same as those for aeroplanes. Cabin crew, if present, should utilise either the brace position for passengers or for cabin crew, depending on their seats and restraint systems.
- D. In the case of a planned emergency landing, the passengers should be briefed on the above information. In the case of an unplanned emergency, the cabin crew may only have enough time to give a short command such as "lean over" or "grab your ankles." Experience has shown that in an attempt to take a brace position of some sort, the passenger will end up in a position that could result in less injury than if no attempt had been made at all.

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