



**CIVIL AVIATION AUTHORITY  
OF VIET NAM**

**ADVISORY CIRCULAR  
AC13-002**

## **CABIN SAFETY INSTRUCTIONS AND INFORMATIONS**

### **SECTION 1 GENERAL**

#### **1.1 PURPOSE**

This Advisory Circular (AC) provides general guidance on the safety-related information and instructions that an operator should provide to passengers; and aircraft operators seeking CAAV approval of passenger safety briefing cards and safety demonstrations for passenger operation.

#### **1.2 STATUS OF THIS ADVISORY CIRCULAR**

This is version [2] 2022 of this AC.

#### **1.3 BACKGROUND**

- A. A successful emergency evacuation and emergency ditching on the ground is a key factor in a survivable when aircraft accident occur.
- B. Passenger briefing cards are vital elements to ensure that passengers are well informed regarding the evacuation routes and methods in preparation for the possible emergency evaluation.
- C. By regulation, a passenger briefing card must be provided at each passenger seat.
- D. The passenger briefing card and safety demonstration must have the prior approval of the CAAV before use in aircraft operations. That approval will be based on the development of a passenger briefing card that conforms to the guidance of this circular.
- E. Safety demonstration for passengers shall be conducted before each flight when the aircraft is on the ground.

#### **1.4 APPLICABILITY**

The requirement for approved the safety-related information and instructions; the passenger briefing cards and safety demonstration applies to all Vietnam operators of

- 1) Large and turbine-engine aircraft in general aviation; and
- 2) Any aircraft operated in commercial air transport.

#### **1.5 RELATED REGULATIONS**

The following regulations are directly applicable to the guidance contained in this advisory circular

- 1) VAR Part 6, Aircraft Instruments & Equipment ;
- 2) VAR Part 10, Aircraft Operations ;
- 3) VAR Part 12, Air Operator Certification and Administration;
- 4) VAR Part 13, AOC Passenger Carrying Requirements.

## 1.6 RELATED PUBLICATIONS

For further information on this topic, operators are advised to review the following publications and regulatory requirements

- 1) Civil Aviation Authority of Vietnam
  - a) AC 12-010, Emergency Evacuation Demonstration
- 2) International Civil Aviation Organization (ICAO)
  - a) Annex 6, Part 1, International Commercial Air Transport, Aeroplanes
  - b) Annex 6, Part 2, International General Aviation Operations-Aeroplanes
  - c) Doc 10086 Manual on Information and Instruction for Passenger Safety

## 1.7 DEFINITIONS & ACRONYMS

### A. The following definitions are used in this advisory circular

- 1) **Able-bodied passengers.** Passengers who are physically able and are willing to help cabin crew maintain good order and discipline on board the aircraft.
- 2) **Cabin crew member.** A crew member who performs, in the interest of the safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who shall not act as a flight crew member.
- 3) **Child.** A passenger who has reached their second birthday but not their twelfth birthday.
- 4) **Child restraint system.** Any device, other than a seat belt, is designed specifically to protect and restrain an infant or child during all phases of flight. It typically has an internal harness and belt combination. The device needs to interface with the aircraft seat. This includes devices that are secured using the aircraft seat belt as well as systems that secure the device to the aircraft seat. The device needs to meet minimum performance standards, as specified by the State of the Operator.
- 5) **Crew member.** A person assigned by an operator to duty on an aircraft during a flight duty period.
- 6) **Cabin Manager/Purser.** A leader and a role model are responsible for leading the cabin crew team on board, taking responsibility for the cabin operation, for the associated customer experience, and for promoting teamwork.
- 7) **Critical phases of flight.** The period of high workload on the flight deck, normally being the periods between the beginning of taxiing until the aircraft is on the route climb phase and between the final part of the descent to aircraft parking.
- 8) **Deportee.** A person who had legally been admitted to a State by its authorities or who had entered a State illegally, and who some later time is formally ordered by the competent authorities to leave that State.

- 9) **Direct access.** A direct route or passage from a seat to an exit from which a passenger can proceed without entering an aisle or passing around an obstruction.
- 10) **Disinfection.** The procedure whereby health measures are taken to control or kill insects present in aircraft, baggage, cargo, containers, goods, and mail.
- 11) **Emergency exit.** Door, window exit, or any other type of exit (e.g. hatch in the flight deck, tail cone exit) used as an egress point to allow maximum opportunity for cabin evacuation within an appropriate period of time.
- 12) **Emergency exit row seating.** Each seat is in a row of seats located at an emergency exit, having direct access to the exit.
- 13) **Escort.** An individual authorized by a Contracting State or an aircraft operator to accompany inadmissible persons or deportees being removed from that Contracting State.
- 14) **Flight crew member.** A licensed crew member is charged with duties essential to the operation of an aircraft during a flight duty period.
- 15) **First Officer (F/O).** A licensed pilot serving in any piloting capacity other than as Pilot-in-Command but excluding a pilot who is onboard the aircraft for the sole purpose of receiving flight instruction.
- 16) **Inadmissible person.** A person who is or will be refused admission to a State by its authorities.
- 17) **Infant.** A passenger who has not reached their second birthday.
- 18) **Oblique-facing seats.** Seats installed in the aircraft where the occupant angle relative to the aircraft longitudinal axis is other than those described for forward-facing, rearward-facing, or side-facing seats.
- 19) **Operator.** The person, organization, or enterprise engaged in or offering to engage in an aircraft operation.
- 20) **Pilot in command (PIC).** The pilot is designated by the operator, or in the case of general aviation, the owner, as being in command and charged with the safe conduct of a flight.
- 21) **Passenger.** A person who is not an operating crew member.
- 22) **Passenger Briefing Card.** A card for the self-briefing of passengers containing all information regarding safety features, emergency equipment, and emergency procedures onboard the aircraft can be used by the passengers to avoid injuries and to enhance their chance of survival in anticipated life-threatening situations.
- 23) **Person with disabilities.** Any person whose mobility is reduced due to a physical incapacity (sensory or locomotor), an intellectual deficiency, age, illness or any other cause of disability when using transport and whose situation needs special attention and the adaptation to the person's needs of the services made available to all passengers.
- 24) **Restraint.** A device designed to safely restrain an occupant in his/her seat to prevent injuries resulting from inertia forces or other in-flight forces such as turbulence. A restraint may be a seat belt, safety harness, or approved child restraint system.
- 25) **Safety harness.** A webbing-based restraint consisting of at least three anchor points restraining both the pelvis and upper torso.
- 26) **Seat belt.** A webbing-based restraint consisting of two anchor points restraining the pelvis. It is also referred to as a lap belt.
- 27) **Special categories of passengers.** Persons who need special conditions, assistance, or

equipment when travelling by air. These may include but are not limited to:

- a) Infants;
  - b) Unaccompanied children;
  - c) Persons with disabilities;
  - d) Persons with mobility impairments;
  - e) Persons on stretchers; and
  - f) Inadmissible passengers, deportees or persons in custody.
- 28) **State of the Operator.** The State in which the operator's principal place of business is located or if there is no such place of business, the operator's permanent residence.
- 29) **Unstaffed exit.** Emergency exit for which no cabin crew member has been positioned for the flight.

## **B. The following acronyms are used in this advisory circular**

- 1) **AC** = Advisory Circular
- 2) **AOC** = Air Operator Certificate
- 3) **CAAV** = Civil Aviation Authority of Vietnam
- 4) **CCM** = Cabin Crew Member
- 5) **FSSD** = Flight Safety Standards Department
- 6) **F/O** = First Officer
- 7) **PIC** = Pilot in Command
- 8) **PUR/CM** = Purser/Cabin Manager
- 9) **TOC** = Table of Contents
- 10) **VAR** = Vietnam Aviation Regulations
- 11) **PBC** = Passenger Briefing Card
- 12) **SCA** = Senior Cabin Crew Member/Purser

## **SECTION 2 PASSENGER SAFETY BRIEFINGS**

### **2.1 REGULATORY CONSIDERATIONS**

- A. Comply with VAR Part 13 paragraph 13.007 a) 5); VAR Part 13 Appendix section 13.007 passenger instructions and VAR Part 10 paragraph 10.200 requires cabin crew members should conduct verbal and visual safety briefings to provide the necessary information to passengers. Passenger safety briefings include the following:
- 1) Pre-departure safety briefing;
  - 2) Exit row safety briefing;
  - 3) Safety briefings for special categories of passengers;
  - 4) Safety briefing conducted before take-off is commonly referred to as a safety demonstration;

- 5) After take-off safety briefing;
- 6) Safety briefing in the event of turbulence;
- 7) Pre-landing safety briefing;
- 8) After landing safety briefing;
- 9) Transit stop safety briefing;
- 10) Refueling safety briefing procedures;
- 11) Information and instructions to passengers during abnormal and emergency situations.

B. The operator should list the content of each briefing described in section 2.2 and include it in its operations manual. The operator's cabin crew training program should address the content and conduct of passenger safety briefings. The CAAV will also review and authorize by approval any subsequent changes to the operations manual and training program related to passenger safety briefings.

NOTE. *Guidance on cabin crew training is contained in the Acceptable Cabin Crew Training and Approval (AC14-004)*

## **2.2 PASSENGERS BRIEFINGS**

### **2.2.1 PRE-DEPARTURE BRIEFING**

The operator's procedures should require cabin crew members to conduct a pre-departure safety briefing before every flight or via a video safety briefing demo (including stop-over). Before departure from the gate or parking stand on the following items:

- 1) Smoking restrictions;
- 2) The back seat is in the upright position and the seatback tray table must be in the stowed position;
- 3) Location of exit doors;
- 4) Location and use of indicator lights to exit doors on the floor of the aircraft;
- 5) Stowage of carry-on baggage, including information on the operator's baggage allowance, designated stowage locations, and special instructions (e.g., place heavier items under the seat instead of in the overhead locker; any restrictions on the stowage of carry-on baggage in emergency exit rows);
- 6) Limitation use of portable electronic devices;
- 7) Location and content of safety instruction board (refer to section 3).
- 8) Location and use oxygen mask;
- 9) Use/unfasten of safety belts (also extension seatbelt and infant seatbelt);
- 10) Emergency floatation means location and use (also infant lifevest);
- 11) Briefing private safety information to passengers at the exit row.

### **2.2.2 EXIT ROW BRIEFING**

A. Exit row is an emergency exit for which no cabin crew member has been assigned. Therefore, passengers should operate these exits in the event of an evacuation. The operator to develop and implement procedures regarding the criteria that passengers must meet to occupy seats

located at emergency exit rows. The operator's procedures should include briefings to passengers seated at exit rows on the operation of the exit and the responsibilities of seating in an exit row;

- B. Before each flight, the cabin crew should brief passengers seated at exit rows on the following items
  - 1) The importance of the role of the passenger in the event of an emergency, so that passengers seated at exit rows are aware of their responsibility to operate the exit;
  - 2) Request the passengers to verbally accept the responsibility;
  - 3) The signal/command that would instruct the passengers to open exits. To prevent un-commanded opening, the cabin crew should also emphasize the need to follow all instructions and to listen closely to the crew's commands; and
  - 4) How to open the exit, including specific aspects of the operation such as
    - a) Check for hazards before opening the exit (i.e., fire, water, debris);
    - b) What to do with the exit hatch, if removable; and
    - c) The location of the placards and the passenger safety briefing card.

### **2.2.3 BRIEFINGS FOR SPECIAL CATEGORIES OF PASSENGERS**

- A. Comply with VAR Part 13 paragraph 13.025 and VAR Part 13 Appendix section 13.025 for requirements to special passengers, in addition to the standard information provided to all passengers on board, certain passengers may require additional, personalized individual briefings, adapted to suit their specific needs.
- B. The operator to provide individual safety briefings to special categories of passengers and their companions, where applicable. These passengers include, but are not limited to the following
  - 1) Persons traveling with infants;
  - 2) Unaccompanied children;
  - 3) Persons with disabilities;
  - 4) Persons with mobility impairments; and
  - 5) Paraplegic persons (non-ambulatory)
- C. Persons on stretchers in general terms, an individual safety briefing for special categories of passengers should include the following
  - 1) Information contained in the safety demonstration (refer to section 2.2.4) and the passenger safety briefing card (refer to section 3) that the passenger may not be able to receive otherwise (e.g., if the passenger is visually impaired) and is necessary for the safety of the person onboard the aircraft; and
  - 2) Additional information specific to the needs of the passenger, as described in section 2.2.3E
- D. Individual briefings should be given to special categories of passengers before take-off, on the first leg of a journey, and before landing but may not need to be repeated during subsequent legs if the flight involves short transit stops on the same aircraft.
- E. Cabin crew should brief special categories of passengers to verify their understanding of the following, as applicable
  - 1) Seat belts and other restraint systems

- a) The use of seat belts and additional features (refer to section 2.2.4B1);
  - b) Use of child restraint systems (CRS), if applicable (refer to section 2.2.3F3a); and
  - c) Means to restrain, “secure” or control animals, if permitted in the cabin;
- 2) Emergency exits
- a) Location of the nearest exit;
  - b) Location of the nearest alternate exits; and
  - c) Emergency lighting (emergency escape path lighting, exit signs);
- 3) Oxygen: (refer to section 2.2.4B5));
- 4) Life vest or individual flotation devices: (refer to section 2.2.4B6));
- 5) Brace position:
- a) Most suitable brace position for the passenger based on physical condition; and
  - b) Commands if bracing is necessary;
- 6) Additional assistance during the flight;
- 7) Assistance in the event of an emergency; and
- 8) Additional information: location of seat controls, call button, passenger service unit, and lavatory.
- F. In addition to the items covered in section 2.2.3E, cabin crew members should address the following points, as applicable
- 1) In the case of a passenger with mobility impairments who would require assistance to move to an exit in the event of an emergency, a cabin crew member should ascertain the passenger’s specific needs and inform him/her of the following
    - a) The most appropriate exit for the passenger;
    - b) The assistance that the passenger might require reaching that exit;
    - c) The most appropriate means of providing that assistance;
    - d) The most appropriate route to that exit; and
    - e) The most appropriate time to begin moving to that exit
  - 2) In the case of a visually impaired passenger
    - a) A tactile familiarization with
      - The equipment that the passenger may be required to use in the event of an emergency; and
      - If requested, the exits; and;
    - b) Inform the passenger of
      - Where the passenger’s mobility device, if any, is to be stored;
      - The number of rows of seats separating the passenger’s seat from the closest exit and the alternate exit; and
      - The features of those exits; and
    - c) If the operator carries Braille or large-print versions of its passenger safety briefing cards on board, a copy should be provided to the visually impaired passenger; and



- 3) In the case of a passenger who is responsible for another person on board the aircraft
- a) If the passenger is responsible for an infant, or a child occupying a CRS, information on
- The use of CRS, including when the parent/guardian is required to secure the CRS occupant, by phases of flight and when the seat belt sign is illuminated;
  - Instruction that an infant/child cannot share a seat belt with the accompanying parent/guardian;
  - Information on the use of bassinets, including when they are permitted;
  - How to place and secure the oxygen mask on the infant/child's face;
  - Use of infant life vest, if available on board, including the location of the infant's life vest, how to remove it from its location and packaging, how to assist the infant with donning it, and when to inflate it;
  - In case of turbulence, the infant/child needs to be secured in the CRS. If the infant/child is not in the CRS when turbulence is encountered, the parent/guardian is responsible for securing him/her in it;
  - In the event of an anticipated emergency landing or ditching, the most appropriate brace position for the passenger and the need for the infant/child to be secured in the CRS; and
  - In the event of an evacuation, the parent/guardian should remove the infant from the CRS and leave the device behind; and
- b) If the passenger is responsible for a person, other than an infant or child
- How to assist that person with donning and securing his or her oxygen mask; and
  - How to use that person's restraint system, if any, onboard the aircraft.

#### **2.2.4 SAFETY DEMONSTRATION**

- A. Comply with VAR Part 13 paragraph 13.007 a) 6) requires, the operator's procedures should require cabin crew members to conduct a safety demonstration before every flight (including stop-overs). The safety demonstration may be conducted by the cabin crew onboard the aircraft or via a video developed by the operator and presented to the passengers before take-off. It should be specific to the aircraft make, model and series operated for the flight. The video demonstrations shall be approved/accepted by CAAV.
- B. The safety demonstration should include information about the following items:
- 1) Use of seat belts and additional features (including when and how to fasten, adjust and release seat belts and/or shoulder harnesses; and the need to keep the seat belt fastened while seated throughout the flight to prevent injury in the event of unanticipated turbulence encounters);
  - 2) Location and presentation of the passenger safety briefing card and the importance for passengers to review it before take-off for safety reasons (refer to section 3);
  - 3) Location of emergency exits (including a mention that the nearest may be behind the passenger, that exits may be blocked, and the need to identify alternative exits);
  - 4) Emergency lighting (emergency escape-path lighting, exit signs);



- 5) Location and use of oxygen masks, if applicable, including
    - a) The actions to be performed by a passenger to
      - Obtain a mask;
      - Activate the flow of oxygen;
      - Don and secure the mask; and
    - b) The requirement for a passenger to don and secure his/her mask before assisting another passenger with his/her mask;
  - 6) The location and use of life vest or individual flotation devices, if applicable, including
    - a) A demonstration of their location (including different stowage locations);
    - b) How to remove life vest from stowage and packaging;
    - c) The method of donning and inflation, when to inflate life vest, and the signaling equipment it contains; and
    - d) Removal and use of flotation devices such as seat cushions;
  - 7) Restrictions on the use of smoking devices (e.g., cigarettes, pipes, cigars, electronic smoking devices, etc.);
  - 8) The use and stowage of portable electronic devices (PEDs);
  - 9) Compliance with crew members' instructions, illuminated ordinance signs and posted placards;
  - 10) Cabin secured aspects (e.g., correct stowage of carry-on baggage, caution when opening overhead bins, refrain from obstructing aisles and cross-aisles; required position of tray tables, seatbacks, footrests, in-flight entertainment system (IFE), window blinds and the wearing of footwear, for movement on the surface, take-off, and landing);
  - 11) What to do with carry-on baggage and belongings in case of an evacuation (to be left behind);
  - 12) Instruct the passenger to read the PBC; and
  - 13) Important the PBC of passengers informing cabin crew members of any safety concerns throughout the flight.
  - 14) During a demonstration by cabin crew, the Operator shall ensure that the vision and audition are responding to all passengers.
- C. In addition to the items listed in section 2.2.4B, the operator may include the following items, as part of the safety demonstration
- 1) Specific information to passengers in the event of an evacuation
    - a) Emphasis on listening to crew commands;
    - b) The importance of speed to evacuate;
    - c) Count seat rows to know how far to the nearest exit in case of reduced visibility;
    - d) Stay low if smoke is present in the cabin;
    - e) Evacuation methods with infants and children;
    - f) Evacuation through exits without assisting evacuation means (i.e., no slide or slide-raft); and

- g) Removal of high-heeled shoes in an evacuation; and
    - h) Leave all belongings during an evacuation
  - 2) Security-related information
    - a) Not to congregate in galleys or near the flight deck;
    - b) Unruly passengers will not be tolerated;
    - c) Passengers may be called upon to assist if there is a security event; and
    - d) The importance of passengers informing cabin crew members of any security concerns throughout the flight;
  - 3) Passenger management
    - a) Policy on alcohol consumption; and
    - b) Coexistence and wellness in high-density seating;
  - 4) Use of Wi-Fi, if installed on board; and
  - 5) Dangerous goods, hazardous materials, including battery-related hazards (crushing, fire).
- D. If the safety demonstration is conducted live by cabin crew members, they should carry it out by following the standard content and sequence contained in the operator's procedures. The operator should equip each aircraft in its fleet with the necessary number of safety demonstration kits, each containing all the equipment and documentation needed to conduct the safety demonstration. During the demonstration, cabin crew members should
  - 1) Point out ordinance signs (e.g., no smoking, fasten seat belts, turn off PEDs);
  - 2) Hold up the seat belt and demonstrate how to fasten, and unfasten it;
  - 3) Point out emergency escape-path lighting;
  - 4) Point out exactly the location of emergency exits;
  - 5) Hold up the passenger safety briefing card, demonstrate where it is found and unfold it in clear view of all passengers (including to show both sides of the card are double-sided);
  - 6) Demonstrate the use of oxygen, how the drop-down oxygen masks will appear (The cabin crew member should don the mask over the mouth and nose and show elastic band behind the head; and
  - 7) If applicable, demonstrate the use of the life vest, including location, how and when to don and inflate it, and the signaling equipment it contains.
- E. If the cabin crew complement does not allow for cabin crew members to be present in each cabin compartment when conducting a live safety demonstration, the demonstration should be repeated until passengers seated in all the cabin compartments have been briefed.
- F. During the conduct of a safety demonstration, the operator should prohibit the cabin crew from performing any non-safety-related activities. All curtains should be opened to provide passengers with an unobstructed view of the demonstration. If the demonstration is done via a video, the cabin crew should verify that the IFE system is functional for all passengers before starting the video. The operator should have a procedure to apply if the IFE fails (i.e., conduct a live demonstration). There may be a situation where the passengers' visibility of the live demonstration may be limited by monuments (i.e., interior features such as class dividers or closets) or seat type (e.g., suites in first- or business-class cabins). In such a situation, passengers should be briefed in small groups or individually. To expedite the process, the cabin crew should make use of the passenger safety briefing card to illustrate the requirements as stated).

- G. During the video demonstration, the cabin crew members should be stationed throughout the cabin. After the completion of the demonstration, the cabin crew should conduct a walkthrough and answer any passenger questions or concerns.
- H. Cabin crew members should not replace the safety demonstration by asking passengers if they are familiar with the operator's equipment, exits, safety, and emergency procedures. The safety demonstration must be completed before take-off.

### **2.2.5 AFTER TAKE-OFF BRIEFING**

The Operator's procedures should require cabin crew members to conduct a briefing once the aircraft is airborne. This briefing is commonly conducted by an announcement made over the public address (PA) system. The cabin crew should brief passengers on the following items

- 1) Smoking restrictions;
- 2) Use of seat belts, including recommending that passengers keep their seat belts fastened when seated, and compliance with fasten seat belt signs;
- 3) Policy on the use and stowage of PEDs.

### **2.2.6 BRIEFING IN THE EVENT OF TURBULENCE**

The operator's procedures should require cabin crew members to conduct a briefing when the aircraft encounters turbulence (when the "fasten seat belt" sign is illuminated). This briefing is commonly conducted by an announcement made over the PA system. The cabin crew should brief passengers on the following items

- 1) The need to return to their seat and fasten seat belts;
- 2) The restriction on the use of lavatories; and
- 3) The stowage of carry-on baggage.

### **2.2.7 PRE-LANDING BRIEFING**

The operator's procedures should require cabin crew members to conduct a briefing before each landing. This briefing is commonly conducted by an announcement made over the PA system. The cabin crew should brief passengers on the following items

- 1) Smoking restrictions;
- 2) The use of seat belts or restraint systems;
- 3) Cabin secured aspects (e.g., correct stowage of carry-on baggage, refrain from obstructing aisles and cross-aisles, required position of tray tables, seatbacks, footrests, IFE, and window blinds for landing, etc.);
- 4) Policy on the use and stowage of PEDs.

### **2.2.8 AFTER-LANDING BRIEFING**

The operator's procedures should require cabin crew members to conduct a briefing after landing. This briefing is commonly conducted by an announcement made by the PA system. Cabin crew should brief passengers on the following items, if applicable

- 1) Smoking restrictions;

- 2) The need to remain seated with the seat belt fastened until the “fasten seat belt” sign is off;
- 3) The need to keep carry-on baggage stowed until the “fasten seat belt” sign is off;
- 4) Policy on the use and stowage of PEDs;
- 5) Instructions regarding safe passenger movement on airport aprons;
- 6) Instruction passenger to carry out baggages and belonging documents before leave aircraft.

### **2.2.9 TRANSIT STOP BRIEFING**

The operator’s procedures should require cabin crew members to conduct a briefing when the aircraft is on the ground with passengers on board during a transit stop. This briefing is commonly conducted by an announcement made over the PA system. The cabin crew should brief passengers on the following items

- 1) Smoking restrictions; and
- 2) Policy on the use and stowage of PEDs;
- 3) Instruction passenger to carry out baggages and belonging documents before leave aircraft.

### **2.2.10 REFUELLING BRIEFING**

The operator’s procedures should require cabin crew members to conduct a briefing when the aircraft is being refueled with passengers on board or embarking/disembarking. This briefing is commonly conducted by an announcement made by the PA system. The cabin crew should brief passengers on the following items

- 1) Refueling is taking place;
- 2) The need to refrain from:
  - a) Fastening seat belts;
  - b) Using lavatories;
  - c) Walking around the cabin; and
  - d) Obstructing the aisles and cross-aisles;
  - e) Smoking restrictions; and
  - f) Use and stowage of PEDs.

### **2.2.11 ABNORMAL AND EMERGENCY SITUATIONS**

A. The operator’s procedures should require cabin crew members to provide information and instructions to passengers during abnormal and emergencies situations. The goal is to enhance their reaction and survival in the event of an accident. Abnormal and emergency situations include the following

- 1) Fire, smoke and/or fumes;
- 2) Cabin pressurization problems and decompression;
- 3) Anticipated and unanticipated emergency landing/ditching;

- 4) Evacuation (on land and water);
- 5) Crewmember incapacitation;
- 6) Rapid disembarkation;
- 7) Emergency descent;
- 8) Reject take-off.

B. Standard information and instructions specific to each of these situations should be included in the operations manual (e.g., cabin crew checklists for preparing the cabin for an emergency landing).

### **2.3 CONSIDERATIONS FOR OPERATIONS WITHOUT CABIN CREW**

On flights where cabin crew is not required, flight crew members should be responsible for providing passengers with the standard briefing material presented in this chapter specific to the aircraft make, model and series operated for the flight. The operator should consider alternative means of transmitting the information (e.g., electronic means, videos, pre-recorded announcements), particularly in single-pilot operations. This may reduce the workload for flight crew members, particularly during critical phases of flight.

## **SECTION 3 PASSENGER SAFETY BRIEFING CARD (PBC)**

### **3.1 REGULATORY CONSIDERATIONS**

- A. Comply with VAR Part 12 paragraph 12.185 requires, the operator must to provide PBC cards for each passenger onboard its aircraft, in convenient locations for the use of each passenger and ensure that each card contains information that is pertinent only to the type and variant of aircraft used for that flight.
- B. The PBC must be located so that the seated passenger be able to see and have access to the PBC when it is placed in its normal location aboard the aircraft.
- C. The PBC should be large enough so that when placed in its normal location aboard the aircraft, the passenger seat for taxi, takeoff, and landing will be able to visually locate and identify the card.

### **3.2 CONTENT OF PBC**

A. The information on the PBC should be specific to the make, model and series of aircraft on which it is used, reflect the specific systems and equipment installed as well as procedures relevant to the systems and equipment on that particular aircraft make, model and series. The PBC should contain the minimum information as outlined by national regulations. It should include the following, as applicable:

- 1) The use and stowage of PEDs.
- 2) Restrictions on the use of smoking devices (e.g., cigarettes, pipes, cigars, electronic smoking devices, etc.).
- 3) Cabin secured aspects:
  - a) Correct stowage of carry-on baggage;

- b) Caution when opening overhead bins;
  - c) Refrain from obstructing aisles and cross-aisles;
  - d) Required position of tray tables, seatbacks, footrests, IFE and window shade for movement on the surface, take-off and landing.
- 4) The use of seat belts and additional features:
- a) When and how to fasten, adjust and release seat belts and or shoulder harnesses;
  - b) Information on the use of CRS.
- 5) the location and use of oxygen masks, including:
- a) The actions to be performed by a passenger to:
    - obtain a mask;
    - activate the flow of oxygen;
    - don and secure the mask;
  - b) The requirement for a passenger to don and secure his/her mask before assisting another passenger with his/her mask.
- 6) The location and use of life vest or individual flotation devices, including:
- a) A demonstration of their location (including different stowage locations);
  - b) How to remove life vest from stowage and packing;
  - c) Method of donning and inflation, when to inflate life vest and the signaling equipment it contains;
  - d) Removal and use of flotation devices such as seat cushions;
  - e) How to use infant lifevest (conduct by cabin crew).
- 7) Emergency exits (including over-wing exits):
- a) Location;
  - b) Method of operation, including what to do with the exit hatch, if removable;
  - c) Checking for hazards before opening the exit (i.e., fire, water, debris);
  - d) Unusable exit;
  - e) Alternative egress routes in case of unusable exit(s);
  - f) Leaving carry-on baggage behind;
  - g) Method of egress through exits without assisting evacuation means;
  - h) Awareness of exit height;
  - i) Awareness of propellers.
- 8) Escape paths and evacuation routes:
- a) Depiction of routes to the exits inside the aircraft;
  - b) Emergency lighting system (the form, function, color and location of the floor proximity emergency escape path markings);
  - c) Movement through the wing to the ground or water;

- d) Movement on the ground or water away from the aircraft.
- 9) Assisting evacuation means
- a) Location of available equipment (e.g., life-raft, slide-raft);
  - b) The location, removal and use of available life-raft(s);
  - c) Method of activation of the slide-raft(s);
  - d) Method of boarding the life-raft or slide-raft including with infants and children;
  - e) Method of egress through exit including with infants and children; and
  - f) Removal of high-heeled shoes in an evacuation.
- 10) Brace position:
- a) The appropriate method based on the seat type; and
  - b) Alternative brace positions (e.g., for expectant mothers, infants, children, tall or large individuals);
- 11) Requirements for exit row passengers.
- 12) Additional raft deployment (if applicable).

B. No advertisements or promotional items should be included on the PBC. It should only contain safety-related information. Anytime a specific crew member is reflected on the card or sequence, the figure in the pictogram should reflect a uniformed crew member.

C. If an operator modifies or changes the information included on its PBC, it should evaluate the content and take steps to verify passenger comprehension.

D. On flights where cabin crew is not required, additional information should be included, such as the following:

- 1) location of first-aid kits;
- 2) location of fire extinguishers that are accessible to passengers;
- 3) location of emergency locator transmitter(s), if removable from the aircraft; and
- 4) location of survival equipment, and if the stowage compartment is locked, the means of access or
- 5) location of the key

### **3.3 DESIGN, LAYOUT AND LOCATION**

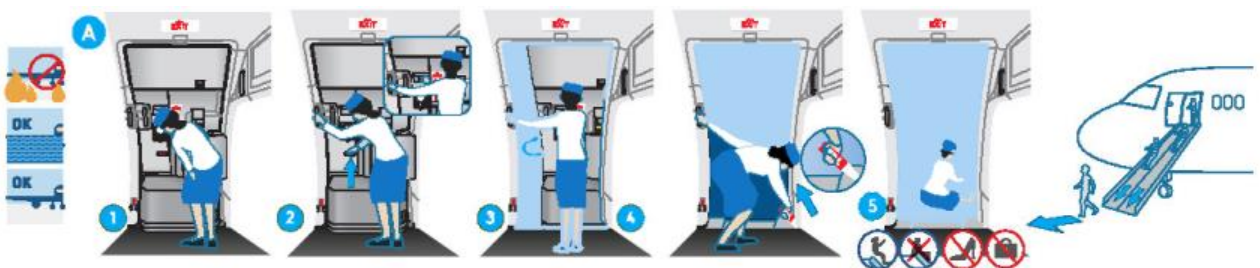
A. Consideration should be given to the design, layout and location of the PBC to promote quick comprehension of its content, in a self-explanatory manner, and to allow passengers to easily see and retrieve it.

B. The method of presentation of the safety information may be through the use of:

- 1) Text;
- 2) Symbols;
- 3) Diagrams;
- 4) Pictures; and/or



- 5) Drawing or other forms of artwork.
- C. Systems, equipment and the actions required to operate them should be depicted pictorially or diagrammatically. Procedures requiring several steps should be presented in the correct sequence, and the sequence should be identified (e.g., numbered steps). Steps should be taken to verify that any symbols used in a PBC are easily recognized. The use of international symbols is encouraged. Examples of international symbols can be found in the following documents:
- 1) The International Organization for Standardization (ISO) standard ISO 3864 — Graphical symbols — Safety colors and safety signs — Part 1: Design Principles for Safety Signs and Safety Markings;
  - 2) The American National Standards Institute ANSI Z535.3-2011 — *Criteria for Safety Symbols*; and
  - 3) The Society of Automotive Engineers (SAE) Aerospace Recommended Practice (ARP) Document No. SAE ARP577E — Emergency, Instruction and Information Placards — Internal and External.
- D. All depictions should be simple and easy to understand. Steps should be taken to verify that any symbols used in a PBC are easily recognized and understood by naïve test subjects. PBC should be tested for comprehension in accordance with recognized standards. Examples of testing methods can be found in the following documents:
- 1) ISO 9186 — Graphical symbols — Test methods
  - 2) ANSI Z535.3-2011 — Criteria for Safety Symbols — Annex B — General Procedures for Evaluating
  - 3) Candidate Safety Symbols.



**Example of emergency exit operating handle and instructions – inside aircraft**



**Example of over-wing exit operating handle and instructions – inside aircraft**

NOTE. — See Appendix 1 for an example of possible symbols

- E. The card should include colors to draw the attention of the passengers, versus only black and white. Some colors convey similar messages to people worldwide. These colors should be used with symbols to provide a standardized meaning on all PBCs to be approved by the CAAV—
- 1) Red indicates something is prohibited or is used to mark hazardous situations
  - 2) Green indicates safety instructions or a “safe way of action.”
  - 3) Blue indicates a status or standard situations
- F. PBC title should be placed in the uppermost right- or left-hand corner of the front of the card and should contain the words
- 1) Passenger Briefing Card;
  - 2) Safety Briefing Card; or
  - 3) For Your Safety.
- G. The phrase “Approved by the CAAV” should appear in the header; The date of approval should follow the approval phrase; The revision number of the PBC should follow the date of approval.
- H. The design of PBC should make it easy to identify the aircraft type. On the cover page, the top quarter of the panel should contain text in a large font that identifies the aircraft make, model and series—ideally, color-coded. The emphasis should be placed on aircraft make, model and series versus the operator’s name or logo.
- I. PBC should be made of a durable material; PBC should be large enough so that when placed in its normal location onboard the aircraft (as determined by the operator and authorized by the CAAV), the seated passenger can see it easily and retrieve it.
- J. The operator may use a self-adhesive safety information placard located on the seatback tray table or another part of the seat in front of the passenger.
- K. Pictograms (also referred to as pictographs) are the recommended media type for PBC and/or passenger information signs, markings and placards, instead of text (refer to section 4.2). If the text is required, it should not replace the pictogram and should be located on the back panel of the passenger safety briefing card.
- L. To ensure consistency and to minimize confusion for passengers, the information provided on the PBC should be comparable to the instructions on the passenger safety information signs, markings and placards installed in the cabin (refer to section 4.3). Pictograms should be identical across all of these. Differences in style and technical content between the forms of information may be confusing and may even provide conflicting information. The operator should review the content of the PBC, passenger information signs, markings and placards to ensure that it is essentially the same and is presented in the same manner.

### 3.4 PORTABLE (TRANSMITTING) ELECTRONIC DEVICES

- A. The PBC should depict the various portable electronic devices that may not be used during airport departures and arrivals.



The above examples include most of the groups of portable electronic devices the operator may determine the effect of the aircraft electronics.

### 3.5 CARRY-ON BAGGAGE

#### 3.5.1 OPERATOR POLICY

A. The PBC should depict and mark as not permitted, stowing carryon baggage

- 1) Behind a bulkhead or partition in front of a seat row;
- 2) Between seat rows;
- 3) Behind the passenger's lower legs; and
- 4) In front of an emergency exit.



B. The PBC should depict the stowage of carry-on baggage in approved locations only, such as under the seat in front (provided there is an under-seat restraint bar) and in overhead compartments.

- 1) A large (heavy) carry-on stowed under the seat should be depicted.

#### 3.5.2 CARRY-ON BAGGAGE DURING EVACUATIONS

A. Passengers will endeavor to collect their personal belongings before evacuating the aircraft, particularly when the danger to life is not immediately evident to them. The operator should be prepared for this eventuality and have a strategy in place to mitigate the risks involved with passengers removing carry-on baggage during an evacuation. Such strategies include the following:

- 1) Reinforcing and emphasizing the requirement to leave personal items behind by including them in the passenger announcements made in the following situations:
  - a) Pre-flight safety briefing;
  - b) Emergency briefing; and
  - c) Before landing on every flight;
- 2) Clear illustrations in the PBC emphasizing that carry-on baggage must not be taken in an emergency;
- 3) Simple, clear cabin crew commands to leave carry-on baggage behind during an evacuation; and
- 4) Training of cabin crew in human response during emergencies and how to influence passengers to leave their carry-on baggage.

B. The operator should identify the accepted action for the cabin crew members to take if passengers ignore their instructions. The following should be considered:

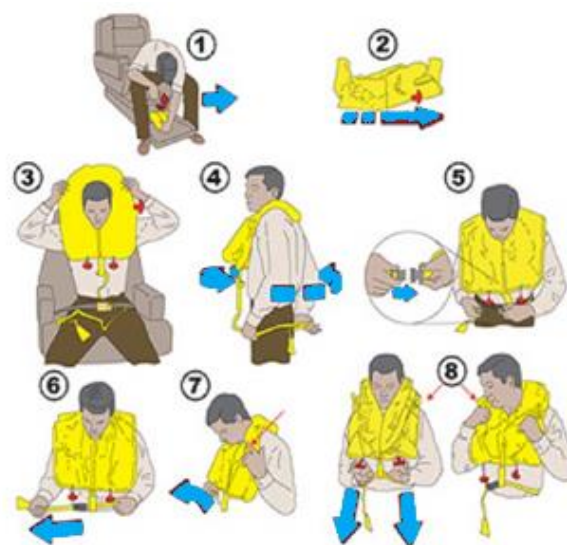
- 1) Forcibly removing carry-on baggage at the exit, including:
  - a) A build-up of items subsequently blocking exit routes;
  - b) Slowed rate of egress due to confrontation;
  - c) Injury to cabin crew members from hoisting baggage over seatbacks away from the exit; and

- d) Physical confrontation with passengers prevents the continuation of evacuation procedures.
- 2) Throwing carry-on baggage outside the aircraft:
  - a) Injury to persons outside the aircraft;
  - b) Injury to cabin crew members performing the task; and
  - c) Damage to ground equipment or slide; and
- 3) Allowing passengers to take items that they insist on taking:
  - a) Slowed rate of egress;
  - b) Injury to a passenger or others using the slide;
  - c) Injury to persons assisting at the bottom of the slide;
  - d) Damage to the slide; and
  - e) A build-up of debris at the bottom of the slide.

### 3.6 INDIVIDUAL FLOTATION EQUIPMENT

A. The PBC must depict the stowage location of the life vests/flotation devices and contain instructions concerning

- 1) Removal of the devices from the stowage location
- 2) Extraction from the stowage pouches or packages
- 3) Donning and adjusting of the life vest;
- 4) Manual and oral inflation backup systems;
- 5) When to inflate the vest;
  - a) Evacuating via open exit door, inflate the vest.
  - b) Evacuating via over-wing exit, inflate on the wing.
  - c) Evacuating an overturned
  - d) Aircraft, inflate when clear of the aircraft.
- 6) Use of the device in the water; and
- 7) Manual operation of survivor locator lights and accessories, as appropriate.



- B. If there are different types of vests on-board the aircraft, the essential differences in donning, adjusting, and operating should be shown.
- C. If no life vests are carried, but flotation seat cushions are available, instructions on how to detach and use them in the water should be shown.
- D. The PBC should also depict the method of fitting adult life preservers on small children.

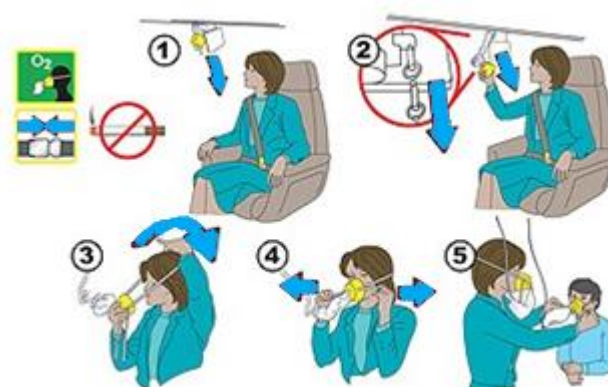




### 3.7 OXYGEN MASK

The PBC should contain instructions on the

- 1) Location;
- 2) Donning;
- 3) Means of adjusting oxygen masks;
- 4) Any further actions needed to start the flow of oxygen; and
- 5) Instructions to passengers to don their oxygen masks before assisting children with their masks.



### 3.8 PREPARATION FOR TAKEOFF & LANDING

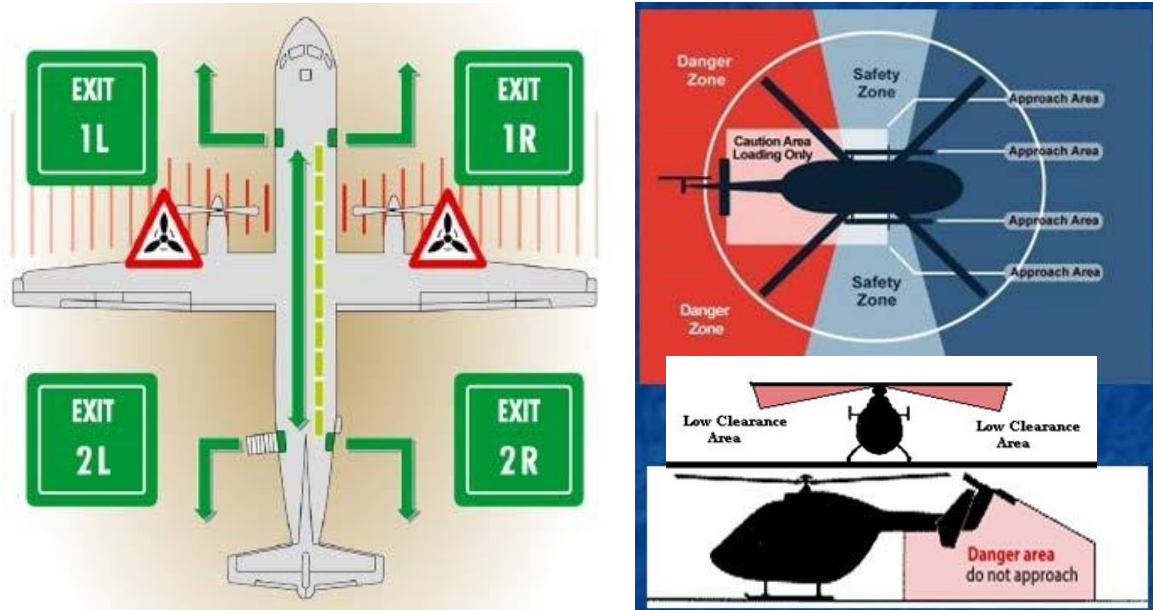
- A. The PBC should show that the tray tables, footrests, in-seat entertainment equipment are to be stowed away for taxi, take-off, and landing.
- B. Seat backs should be shown in the fully upright position (or moving to that position) and armrests in their regular (horizontal) position.

### 3.9 EXIT SEATING

- A. The exit seating information should outline the textual guidance for the exiting seating program.
- B. The important part of the requirement is that the information must be available at the exit seat.
  - 1) The information regarding exit seating must be printed on the PBC in the languages in which briefings and oral commands are given by the crew.
  - 2) Information on the criteria and functions applicable to a passenger occupying an exit seat must be listed on the card.
- C. Besides, 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
  - 1) He/she cannot meet the selection criteria;
  - 2) Has a non-discernible condition that will prevent him or her from performing the functions listed above;
  - 3) May suffer bodily harm as the result of performing one or more of those functions; or
  - 4) Do not wish to perform those functions.

### 3.10 ESCAPE ROUTES DURING EMERGENCY EVACUATIONS

- A. The PBC for a turboprop airplane must contain guidance to avoid contact with the propellers during an emergency evacuation.

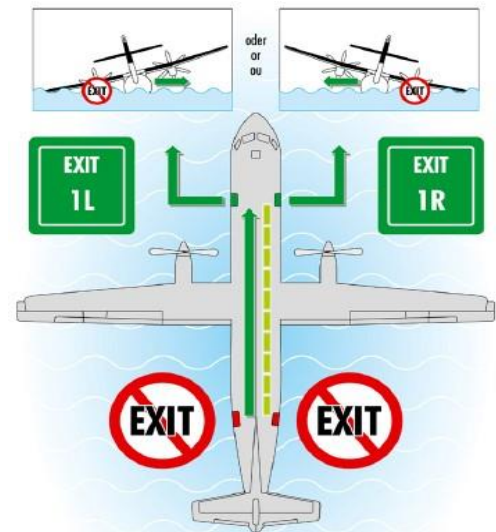


- B. The PBC for a helicopter must contain guidance to avoid contact with the main and tail rotors during an emergency evacuation, which will include the possible dipping of the main rotor.

### 3.11 EXTENDED OVERWATER OPERATIONS

#### 3.11.1 DITCHING EXIT AVAILABLE FOR USE

- A. If an aircraft is to be operated over water, the PBC should depict the exits that may be usable and those that will not be usable after a ditching.
- B. For example, the diagram to the right illustrates the ditching of a high wing airplane.
- 1) Note that the rear exits that will normally not be available during ditching have prohibitive symbols.
  - 2) Because of the high wing, the prohibitive symbols are also used to denote that all of the exits on the down-wing side will not be available.



#### 3.11.2 BRIEFING OF SELECTED ABLE-BODIED PERSON

- A. If company procedures allow and time is available, the cabin crew may choose passengers to assist with the positioning of the raft, and blocking of persons.
- B. In this case, it is better to provide briefing cards to the persons to advise them of the location, extraction and positioning of the life rafts.

### 3.11.3 LOCATION OF THE LIFE RAFT

When life rafts are carried on the aircraft, the PBC should show their location in the cabin (or as slide-rafts).

### 3.11.4 DEPLOYMENT OF THE LIFE RAFTS

- A. When life rafts are required to be carried in extended overwater operations, the PBC should depict life raft and slide/raft stowage, launching, and securing locations.
- B. The PBC also should contain instructions for passengers concerning
  - 1) Preparation for use;
  - 2) Inflation methods; and
  - 3) Means for securing rafts to the aircraft.

## 3.12 INSTRUCTIONS FOR BRACE POSITIONS

### 3.12.1 BRACE POSITION FOR CABIN CREW MEMBERS

#### 3.12.1.1 Forward-facing cabin crew seat

In a forward-facing cabin crew seat, cabin crew members should brace according to the following instructions:

- 1) Slide back in the seat as far as possible towards the backrest; ensuring that upper and lower back is against the backrest;
- 2) Securely fasten seat belt and shoulder harness:
  - a) Tighten firmly;
  - b) Seat belt and harness straps must not be twisted;
- 3) When tightening the shoulder harness, make sure that the seat belt (lap strap) remains low across the hips and that the buckle is positioned correctly, as per manufacturer instructions;
- 4) Place the chin on chest;
- 5) Rest hands on thighs;
- 6) Place feet and legs slightly apart;
- 7) If there is no bulkhead within forwarding reach, keep feet flat on the floor and stretch out legs as far as possible; or



**Brace position in forward-facing cabin crew seats, without and with a bulkhead**

- 8) If there is a bulkhead within forwarding reach, keep feet flat on the floor and slide them forward until the tips of the toes touch the bulkhead (do no push feet against the bulkhead).

#### 3.12.1.2 Rearward-facing cabin crew seats

Cabin crew members should brace according to the following instructions



- 1) Slide back in the seat as far as possible towards the backrest; ensuring that upper and lower back is against the backrest;
- 2) Securely fasten seat belt and shoulder harness:
  - a) Tighten firmly;
  - b) Seat belt and harness straps must not be twisted; and
  - c) When tightening the shoulder harness, make sure that the seat belt (lap strap) remains low across the hips and that the buckle is positioned correctly, as per manufacturer instructions;



**Brace position in rearward-facing cabin crew seats, without and with a bulkhead**

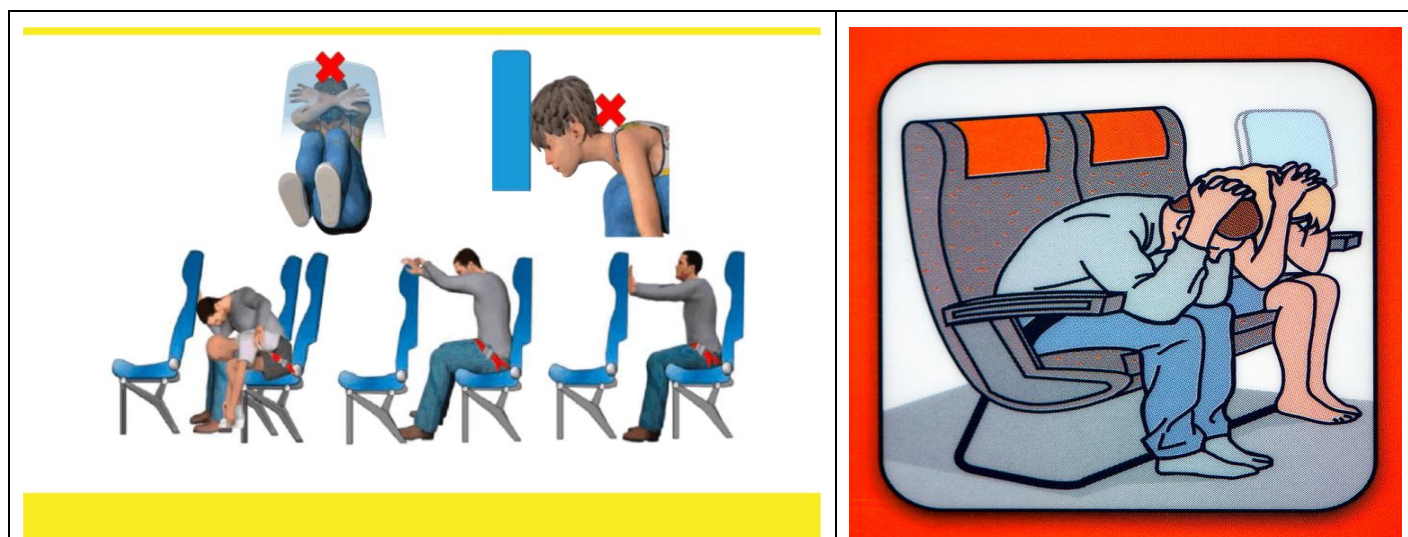
- 3) Lean back and keep head against the backrest/headrest;
- 4) Cross arms in front of the chest (do not hold the shoulder harness straps);
- 5) Place feet and legs slightly apart;
- 6) Place feet flat on the floor; and
- 7) Keep knees bent at 90 degrees.

*Note.* —There are currently no studies that have used double cabin crew seats. Therefore, no recommendations have been made in this manual.

### 3.12.2 BRACE POSITION FOR PASSENGERS

In a forward-facing passenger seat fitted with a lap strap seat belt only, passengers should brace according to the following instructions

- 1) Sit as far back as possible;
- 2) Fasten seat belt and tighten firmly (low across the hips to prevent submarining - when a passenger slides forward under a loosely fitted seat belt. The seat belt should not be twisted);
- 3) Tuck chin onto chest;
- 4) Bend forward (“roll up into a ball”);
- 5) Place head against the seat in front, and
- 6) Place hands on top of the head, or
- 7) Place arms at sides of lower legs or hold lower legs (holding onto the lower legs may provide a more stable position); and
- 8) Place feet flat on the floor, as far back as possible; or
- 9) If passengers are seated at a bulkhead row or cannot reach the seat in front:
  - a) Bend forward and place hands on top of the head; or
  - b) Bend forward and place arms at the sides of lower legs or hold lower legs.



**Brace positions in forward-facing passenger seats**

## **SECTION 4 PASSENGER INFORMATION SIGNS, MARKINGS, AND PLACARDS**

### **4.1 REGULATORY CONSIDERATIONS**

A. Comply with VAR Part 6 paragraph 6.123 requires an aircraft must be equipped with the means of ensuring that the following information and instructions are conveyed to passengers:

- 1) When seat belts are to be fastened,
- 2) When and how oxygen equipment is to be used if the carriage of oxygen is required;
- 3) Restrictions on smoking;
- 4) Location and use of life jackets or equivalent individual flotation devices where their carriage is required; and
- 5) Location and method of opening emergency exits.

B. In addition to the above, the following information should be conveyed to passengers, where applicable:

- 1) The recommendation that seats belts be fastened whenever seated;
- 2) The position of the seatback, headrest, footrest and tray table for movement on the surface, take-off and landing;
- 3) The stowage of IFE screens and/or entertainment controls;
- 4) The restrictions on carry-on baggage stowage; and
- 5) The use and stowage of PEDs, including stowage restrictions for laptop computers (e.g., not in a seat pocket).

C. The PIC shall turn on required passenger information signs during any movement on the surface, for each takeoff and each landing, and when otherwise considered to be necessary.

D. Airworthiness standards should encompass requirements for passenger information signs, marking and placards found inside the cabin. They should stipulate that the aircraft must contain

specified signs, markings and placards, as well as any additional information, instrument markings and placards required for the safe operation of systems and equipment for which there is an unusual design, operating or handling characteristics. Signs, markings and placards are subject to applicable standards set out by the State of Design as part of the type certification process and approved, accepted or validated by the CAAV to demonstrate evidence that the aircraft meets its airworthiness requirements. The operator may wish to add additional placards not required by VAR. The CAAV will have an approval process in place to address individual operator requests for additional placards.

E. Signs, markings and placards should possess the following characteristics, to be deemed suitable:

- 1) be legible
- 2) be easy to understand
- 3) be located in an obvious place and visible
- 4) not be easily erased, removed, disfigured, or obscured
- 5) include both a locator (at eye level to attract attention) and a marker (at the exact location, if that location is at floor level for example)
- 6) have the adequate letter to background contrast (e.g., black on white);
  - a) for emergency equipment placards, red on white or vice-versa should be used;
- 7) use symbols (pictograms) versus words, as much as possible;
  - a) if words are used, languages required as part of the airworthiness standards should be used (refer to section 5);
  - b) if words are used, imperative sentences should be used (i.e., expressing a command, such as “pull tab to open”); and
  - c) if pictograms are used, international symbols are encouraged, to promote harmonization (refer to section 4.2).

*Note.* —Other colors may be used to depict other safety equipment (e.g., green for medical equipment/first aid kits).

## 4.2 USE OF PICTOGRAMS

A. Pictograms are the recommended media type for signs, markings and placards (versus text). Pictograms are used to overcome the issue of passengers not being able to read or understand the language of a textual sign, marking or placard which would result in them missing out on information that may be critical for the safety of flight or to prevent personal injury. The use of pictograms for signs, markings and placards promotes global comprehension of their meaning and helps surpass language barriers.

B. To be considered acceptable, a pictogram should meet all the criteria listed in section 4.1.E and have a minimum size that will allow a person to understand the information that the pictogram is relaying under all relevant combinations of lighting conditions and viewing distance. Since color perception decreases with darker lighting conditions, pictograms should be designed to be readable and comprehensible even in a monochrome style. Colors should only give additional information and should be used to categorize signs, markings and placards according to their meaning. SAE Document No. ARP577E contains general and detailed guidance on written instructions, pictorial instructions, minimum picture and word size, placard and background color combinations and placard placement. SAE Document No. ARP503F – Emergency Evacuation

Illumination provides guidance on the provision of adequate illumination to permit aircraft occupants to locate, proceed to, operate and use emergency exits, slides, life jackets, life-rafts, slide-rafts and survival equipment.

C. As part of the layout standardization, a common color scheme should be applied throughout all signs, markings and placards. Describing safety colors and safety signs for graphical symbols, and aiming at commonality with recent aviation standards, examples of a validated color scheme are as follows:

- 1) Firefighting equipment should be shown in red color;
- 2) Medical equipment and means of escape should be shown in green color;
- 3) Warnings should be accentuated by a yellow triangle;
- 4) Prohibitions should be marked in red; and
- 5) Mandatory actions should be marked in blue.

D. This colour scheme is continued for contour lines that have been introduced to cluster the graphic elements on a placard and to separate them from elements of adjacent markings or placards:

- 1) Placards related to firefighting equipment should have a red contour;
- 2) Placards related to medical equipment and means of escape should have a green contour;
- 3) Placards showing prohibitions should have a red contour;
- 4) Placards showing mandatory actions should have a blue contour; and
- 5) Placards related to other indications or instructions should have a grey contour.

## 4.3 CONTENT OF SIGNS, MARKINGS AND PLACARDS

### 4.3.1 SEAT BELT USE

Signs that notify occupants when seat belts must be fastened should be installed in the cabin. The flight crew should be able to operate them from the flight deck. When illuminated, the “fasten seat belt” sign should be legible to each person seated in the cabin, under all probable conditions of cabin illumination and for any seat position such as upright, reclined, swiveled or tracked.



Example of a “fasten seat belt” sign



Example of a “fasten seat belt” placard

### 4.3.2 SAFETY AND EMERGENCY EQUIPMENT

Marking and placards for safety and emergency equipment are addressed as part of the certification process.

Each safety or emergency equipment control to be operated by the crew in the event of an emergency (e.g., controls for automatic life-raft releases) should be marked showing how it is to be used. Besides, each location (e.g., overhead bin or compartment) that carries any fire extinguishing, signaling or other life-saving equipment (e.g., portable oxygen bottles) should be marked accordingly. Stowage provisions for required safety and emergency equipment should be marked to identify the contents and facilitate the easy removal of such equipment.



**Example of a placard for safety and emergency equipment**

### 4.3.3 RESTRICTIONS ON SMOKING

- A. Smoking is prohibited onboard the aircraft, at least one placard or sign should be installed, stating the smoking prohibition. The placard or sign should be legible to each occupant seated in the cabin, under all probable conditions of cabin illumination and for any seat position such as upright, reclined, swiveled or tracked.
- B. Lavatories should have “no smoking” or “no smoking in lavatory” placards located inside and outside of the lavatory door and should be at eye level and visible to the occupants. A placard should be located on, or adjacent to, the door of each receptacle used for the disposal of flammable waste materials that indicates disposal of cigarettes is prohibited in the receptacle.



**Example of a “no smoking” sign**



**Example of a “no smoking” placard**



**Example of a placard on a disposal receptacle**



#### 4.3.4 EMERGENCY EXITS

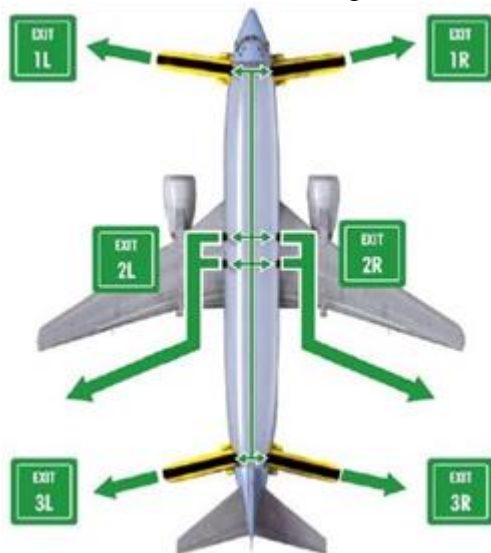
A. Each emergency exit designated for use by occupants in the event of an evacuation, its means of access, and its means of the opening should be marked. The markings used should enable occupants to identify and locate each exit from a distance equal to the width of the cabin. Besides, means should be provided to assist the occupants in locating the exits in conditions of dense smoke.



**Example of emergency exit markings**

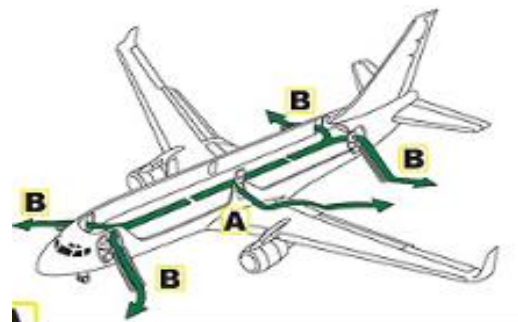
B. The location of each emergency exit should be indicated by a sign visible to occupants, as they approach along the main aisle (or aisles). Requirements should include the following

- 1) An emergency exit locator sign above the aisle (or aisles) near each exit, or at another overhead location if it is more practical because of low headroom (a single sign may be used to indicate more than one exit if each exit can be seen readily from the sign);
- 2) An emergency exit marking sign next to each exit (a single sign may be used to indicate two exits if they can both be seen readily from the sign);
- 3) A sign on each bulkhead or divider that prevents fore-and-aft vision along the cabin to indicate emergency exits beyond (and obscured by) the bulkhead or divider. If this is not possible, the sign should be placed at another appropriate location; and
- 4) Each sign may use the word 'exit' in its legend in place of the term 'emergency exit' or a universal symbolic exit sign. The design of exit signs must be chosen to provide a consistent set throughout the cabin.



For example:

1L = forward exit on the left side



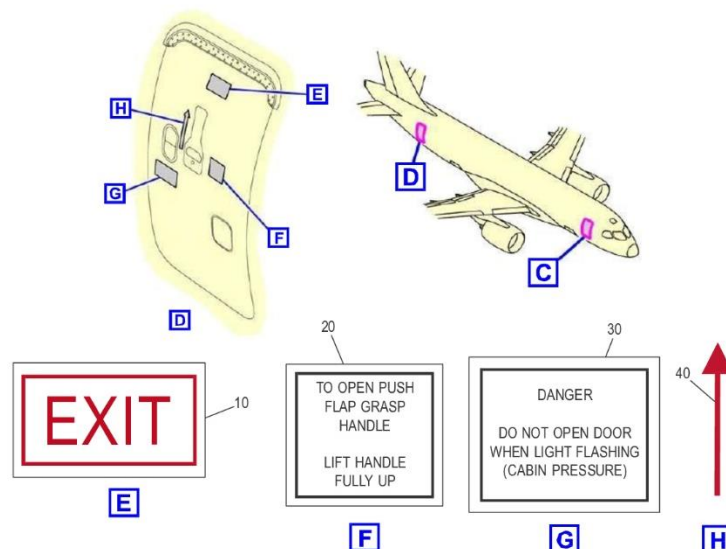
C. The location of the operating handle and instructions for opening each exit from inside the aircraft should be shown in the following manner

- 1) A marking, on or near the exit, that is readable from a set distance (typically about 76 cm or 30 inches)
- 2) The operating handle for Type A, Type B, Type C or Type I exits should be self-illuminated with a set initial brightness (typically of at least 160 microlamberts) or be

conspicuously located and well illuminated by the emergency lighting even in conditions of occupant crowding at the exit;

- 3) For Type A, Type B, Type C, Type I or Type II exits with a locking mechanism released by the rotary motion of the handle, clear markings indicating
    - a) A red arrow, with a shaft at least three-fourths of an inch wide and a head twice the width of the shaft, extending along at least 70 degrees of arc at a radius approximately equal to three-fourths of the handle length;
    - b) That the centerline of the exit handle is within  $\pm 2.5$  cm or 1 inch of the projected point of the arrow when the handle has reached full travel and has released the locking mechanism;
    - c) The word “open” in red letters (typically 2.5 cm or 1 inch high), placed horizontally near the head of the arrow; and
  - 4) For each Type III exit, placards that
    - a) Are readable by all persons seated adjacent to and facing a passageway to the exit;
    - b) Accurately state or illustrate the proper method of opening the exit, including the use of handholds. The method of opening the exit should take into account the ergonomics of the exit design (e.g., if the exit is to be operated from the seated position, then this should be depicted); and
    - c) If the exit is a removable hatch, state the weight of the hatch and indicate an appropriate location to place the hatch after removal.
- D. Each emergency exit that is required to be opened from the outside, and its means of opening, should be marked on the outside of the aircraft. Besides, the following should apply
- 1) The outside marking for each emergency exit on the side of the fuselage should include a colored band outlining the exit (typically a two-inch band);
  - 2) Each outside marking including the band should have color contrast to be readily distinguishable from the surrounding fuselage surface; and
  - 3) For exits other than those in the side of the fuselage (e.g., ventral or tail-cone exits), the external means of opening, including instructions if applicable, should be conspicuously marked in red, or bright chrome yellow if the background color is such that red is inconspicuous. When the opening means is located on only one side of the fuselage, a conspicuous marking to that effect should be provided on the other side.





- E. If the aircraft has internal doors, each door that must be used to reach any required emergency exit should have a suitable placard stating that the door is to be latched in the open position during take-off and landing (except for the flight-deck door).
- F. Emergency lighting, including illumination of emergency exit marking and locating signs, interior lighting in emergency exit areas, and floor proximity escape path marking, should be installed by following the applicable airworthiness standards.

#### 4.3.5 OVER-WING MARKING

An escape route should be established from each over-wing emergency exit and covered with a slip-resistant surface except for flap surfaces suitable as slides. Unless a means for channeling the flow of evacuees is provided, the escape route surface should have an adequate reflectance (typically of at least 80 percent), and be defined by markings with an appropriate surface-to-marking contrast ratio (typically of at least 5:1). Exterior emergency lighting should be provided at each over-wing emergency exit, by following with the illumination values defined in the applicable airworthiness standards.



Example of over-wing markings

#### 4.3.6 BAGGAGE AND CARGO COMPARTMENTS

Each baggage and cargo compartment should have a placard stating any limitations on contents, including weight, that is necessary under the loading requirement. Typically, under-seat, baggage-restraint systems designed for the stowage of carry-on articles weighing not more than 9 kgs (20 pounds) are excluded from the requirement for a loading-limitation placard. Compartments displaying "no stowage" placards need not have a weight-limit placard.



Example of baggage compartment placard

**SECTION 5 LANGUAGE REQUIREMENTS**

- A. Information provided to passengers via safety briefings, announcements, safety demonstrations, the passenger safety briefing card and passenger information signs, marking and placards should be clear and presented understandably. If text is necessary on the passenger safety briefing card and/or marking and placards, it should be in Vietnamese and in English to promote appropriate communication with passengers.
- B. The operator should consider the following when selecting language requirements related to safety briefings on international flights, to cover the largest percentage of passengers on board:
- 1) Official language(s) of the State of departure;
  - 2) The use of English; and
  - 3) Official language(s) of the State of destination.
- C. The operator should consider the language(s) of the passengers on board and assign language-qualified cabin crew members or interpreters on board the aircraft, on specific routes. Besides, the operator should verify that emergency exit-row occupants comprehend the language spoken by the crew.

## Appendix 1 Use of Standard Symbols

The following diagram provides examples of the use of symbols and colors.

