

Revision 0

Occupancy of Emergency Exit Rows

20 December 2018

General

Civil Aviation Authority (CAA) Advisory Circulars (ACs) contain information about standards, practices, and procedures that the Director has found to be an **acceptable means of compliance** with the associated rule.

Consideration will be given to other methods of compliance that may be presented to the Director. When new standards, practices, or procedures are found to be acceptable they will be added to the appropriate AC.

Purpose

The AC describes an acceptable means of compliance with Civil Aviation Rule Part 121 relating to the occupancy of exit rows with direct access to unstaffed emergency exits, or exits where a single cabin crew member is responsible for a pair of exits. The recommendations are that at least one able-bodied passenger (ABP) or passengering crew member occupies each unstaffed exit during the critical phases of flight, and that additional briefings are provided to these passengers.

Adoptions of these recommendations will aide passengers in the event of an emergency to be prepared for the active role they may be required to play in assisting cabin crew. A well prepared passenger will increase the probability of a timely and safe exit of passengers from an aircraft during an emergency evacuation, reducing the possibility of injuries and loss of life.

Related Rules

This AC relates specifically to Civil Aviation Rules 121.81 passenger safety and 91.211 passenger briefing. These rules comply with the International Civil Aviation Organization's (ICAO) Standards and Recommended Practices (SARPs), as set out in Annex 6 Operation of Aircraft.

Change Notice

This is the initial issue of this advisory circular.

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1. Definitions

1.1 The following definitions are sourced from Civil Aviation Rule Part 1, *Definitions and Abbreviations* or ICAO Doc 10086, *Manual on Information and Instructions for Passenger Safety*, First Edition, 2018 or ICAO Doc 10002, *Cabin Crew Safety Training Manual, First Edition*, 2014.

Able bodied passengers. Passengers who are clearly physically able and are willing to help cabin crew maintain good order and discipline on-board the aircraft.

Aircraft. Any machine that can derive support in the atmosphere from the reactions of the air otherwise than by the reactions of the air against the surface of the earth.

Baggage. Personal property of passengers or crew carried on an aircraft by agreement with the operator, or personal property of passengers or crew that is intended by passengers or crew to be carried on an aircraft.

Cabin crew member. A crew member who performs, in the interest of safety of passengers, duties assigned by the operator or the pilot-in-command of the aircraft, but who must not act as a flight crew member.

Carry-on baggage. Baggage and any other item that—

- (a) is carried on to an aircraft by a passenger or crew member with the agreement of the operator
- (b) remains in the custody of the passenger or crew member.

Competency element. An action that constitutes a task that has a triggering event and a terminating event that clearly defines its limits, and an observable outcome.

Competency. A combination of skills, knowledge and attitudes required to perform a task to the prescribed standard.

Crew member. A person carried by an aircraft who is—

- (a) assigned by the operator—
 - (1) as a flight crew member or flight attendant to perform a duty associated with the operation of the flight; or
 - (2) to perform a duty associated with the operation of the aircraft during flight time.

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 descent to aircraft parking.

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.

Embarkation. The boarding of an aircraft for the purpose of commencing a flight, except by such crew or passengers as have embarked on a previous stage of the same through-flight.

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 time period.

Emergency exit row seating. A row of seats located at an emergency exit, having direct access to the exit.

Flight attendant. An appropriately trained person assigned by the operator to be responsible to the pilot-in-command for passenger safety on an aircraft.

Ground handling. Services necessary for an aircraft's arrival at, and departure from, an airport, other than air traffic services.

Human performance. Human capabilities and limitations which have an impact on the safety and efficiency of aeronautical operations.

Operator. A person, organisation or enterprise engaged in or offering to engage in an aircraft operation.

Passenger. In relation to an aircraft, means any person carried by the aircraft, other than a crew member:

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
- (f) inadmissible passengers, deportees or persons in custody.

Unstaffed exit. Emergency exit for which no cabin crew member has been positioned for the flight.

2. Introduction

2.1 This advisory circular acts as guidance to operators on the recommended occupancy of seat rows with direct access to emergency exits during the critical phases of flight - taxi, take-off and landing (TTL) by ensuring at least one briefed able-bodied passenger (ABP) or passengering crew member is seated adjacent to all unstaffed emergency exits or seats next to an exit where a single cabin crew member is responsible for a pair of exits. Additionally, guidance is given on the selection of ABPs and what may need to be covered in the briefing to these persons, to ensure they are prepared for the active role they may be required to play in an aircraft evacuation.

2.2 Emergency exit row seating encompasses each seat in a row of seats located at an emergency exit, having direct access to the exit. When emergency exits are not assigned to cabin crew members, they are referred to as unstaffed exits (or self-help exits). Unstaffed exits may be floor-level exits or window exits, such as those located on some aircraft at the over-wing location. Passengers are expected to follow the operators' policy on exit row seating and the opening of unstaffed exits in the event of an evacuation. Where a single crew member is responsible for a pair of exits, the cabin crew member may not be positioned at one of the exits during TTL. In this instance, it is recommended that an ABP is seated with direct access to the unmanned exit, and be willing to assist in an emergency evacuation should it be required.

2.3 It has been clearly shown that the actions of passengers in an emergency can have a significant impact on survival. For this reason it is recommended that along with having at least one person seated with direct access to any unstaffed exit, that the operator has assessed these person/s as suitably able and willing to assist in an emergency. The operator must also competently brief these person/s on the operation of the exit that may be required to be opened in an emergency evacuation. The briefing given should be specific to the exit which they are seated adjacent to. The briefings will aid in the correct operation of the exit as well as reducing the serious risk of un-commanded opening of exits.

3. Safety Risk

3.1 Rules 121.81 and 91.211 do not currently specify detailed requirements for occupation of exit rows during critical phases of flight, nor specify briefing standards for those persons who have been seated in exit rows, or what constitutes an ABP.

3.2 Currently, the practice is that in an emergency evacuation, the person seated immediately adjacent to an unstaffed emergency exit (self-help exit) will understand to assess external hazards and open the exit (if safe to do so), thus enabling passengers to exit. However, it is not uncommon for these seats in emergency exit rows on a Part 121 passenger aircraft to be left empty and the exit unmanned.

3.3 Furthermore, where there is a single cabin crew member responsible for operating a pair of floor level exits there is not always a briefed ABP seated with direct access to the door to assist if required.

3.4 As a result of this there is a risk that in an emergency evacuation, if there is no ABP to assist at an unstaffed exit, or at an exit where one flight attendant is responsible for a pair of exits then:

- (a) the cabin crew may not be able to get to the exit/s to open them

- (b) the emergency exit may be delayed in being opened and/or other passengers may be delayed in getting to the exit and opening it, this may result in evacuation delays.
- (c) the emergency exit may not get opened at all
- (d) the emergency exit may get opened by other passengers when it should not be opened
- (e) the exit may get opened without the outside conditions being assessed creating further risk to passengers and crew
- (f) passengers may not be aware of the instructions specific to that exit and operation of how to open / remove the exit
- (g) there is increased potential for harm to passengers and crew during an emergency, because it may limit the number of emergency exits in operation; there is an increased potential for harm to passengers and crew during an emergency if the passenger seated in an emergency exit row has not been appropriately briefed and potentially reacts adversely to the emergency
- (h) a passenger that may not be suitably able-bodied lacking the strength and ability to remove the exit, may attempt to open the exit which could potentially delay or impede an evacuation process.

3.5 In response to the risks, the CAA has developed this advisory circular. This guidance material (GM) has been accepted as an adequate level of safety mitigation.

4. International Practice

4.1 Occupancy of unstaffed exit rows

4.1.1 Internationally, EASA is amending its air operation regulations to require seat rows with direct access to emergency exits to be occupied by passengers during the critical phases of flight, and that additional briefings are provided to these passengers. Further, CASA require that at least one crew member must be satisfied that each person occupying an emergency exit row seat is suitable to assist in case of an emergency.

4.1.2 ICAO Standards and Recommended Practices (SARPs) do not require occupancy of seats at unstaffed exit rows during a flight. Likewise, not all States' national regulations require occupancy of seats at unstaffed exit rows. Therefore, aircraft may be operated without persons located at or near unstaffed exits. In the event of an evacuation, a situation may exist where no one is present to operate these exits. Leaving unstaffed exit rows unoccupied may also limit the number of usable exits in an evacuation. In addition, there are no ICAO SARPs addressing the criteria for selecting passengers who may be seated in an emergency exit row, neither a specific requirement for the operator to brief passengers seated at an unstaffed exit row. However, ICAO Annex 6 to the Convention on International Civil Aviation, *Operation of Aircraft, Part I — International Commercial Air Transport — Aeroplanes, Chapter 4. Flight Operations*, section

4.2.12.1 states that:

4.2.12.1 The operator shall ensure that passengers are made familiar with the location and use of:

- (a) seat belts;*
- (b) emergency exits;*
- (c) life jackets, if the carriage of life jackets is prescribed;*
- (d) oxygen dispensing equipment, if the provision of oxygen for the use of passengers is prescribed; and*
- (e) other emergency equipment provided for individual use, including passenger emergency briefing cards.*

4.2 Passenger briefing

4.2.1 Certain States mandate unstaffed exit row briefings, while others do not. Although an unstaffed exit may contain placards with operating instructions, passengers who have not been briefed may be unable to operate it as expected in the event of an evacuation, or fulfil the responsibilities expected of persons seated in an emergency exit row. The absence of a briefing may lead to a degradation of safety.¹

4.2.2 ICAO Doc 10086 *Manual on Information and Instructions for Passenger Safety* states in section 5.2:

5.2 EMERGENCY EXIT ROW OCCUPANCY

The operator should establish procedures on emergency exit row occupancy, including for unstaffed exit rows during critical phases of flight. The operator should also establish procedures to ensure that seats located at emergency exit rows are not occupied by passengers whose presence in those seats could adversely affect the safety of passengers or crew members during an evacuation.

5. GM - Selection Criteria of Able-bodied Passengers to Occupy an Emergency Exit Row.

5.1 Presently for applicable New Zealand Air Operator Certificate holders, the operator must meet rule 121.81, rule that ensures passengers are seated where, in the event of an emergency evacuation, they will not hinder evacuation from the aircraft.

5.2 It is recommended that operators ensure persons that are seated in unstaffed exit rows or at an exit where one flight attendant is responsible for a pair of exits are able-bodied in order to meet the functions required to operate an exit such as having sufficient mobility, strength, and dexterity in both arms and hands and both legs.

¹ ICAO Doc 10086, *Manual on Information and Instructions for Passenger Safety*, First Edition, 2018

5.3 The Federal Aviation Administration (FAA) define this requirement under [Federal Aviation Regulations \(FAR\) 121.585²](#) (§ 121.585 (b)(1)(i-x)) as:

- (i) *To reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanisms;*
- (ii) *To grasp and push, pull, turn, or otherwise manipulate those mechanisms;*
- (iii) *To push, shove, pull, or otherwise open emergency exits;*
- (iv) *To lift out, hold, deposit on nearby seats, or manoeuvre over the seatbacks to the next row objects the size and weight of over-wing window exit doors;*
- (v) *To remove obstructions similar in size and weight to over-wing exit doors;*
- (vi) *To reach the emergency exit expeditiously;*
- (vii) *To maintain balance while removing obstructions;*
- (viii) *To exit expeditiously;*
- (ix) *To stabilize an escape slide after deployment; or*
- (x) *To assist others in getting off an escape slide;*

5.4 The selection requirement listed in the ICAO Doc 10086 *Manual on Information and Instructions for Passenger Safety* states in sections 5.4.1 and 5.4.2.

5.4.1 *The operator's procedures should include a criteria that passengers must meet in order to be eligible to occupy seats located in an emergency exit row. Such criteria are necessary so that a passenger's presence at an emergency exit row does not adversely affect the safety of other occupants during an evacuation. Passengers seated in emergency exit rows must meet the following criteria:*

- (a) *be physically capable of operating the emergency exit;*
- (b) *be capable of understanding the printed and spoken instructions;*
- (c) *be able to determine if the exit is safe to open visually;*
- (d) *have sufficient mobility, strength and dexterity to reach, operate and stow (or otherwise dispose of) the exit hatch, if removable;*
- (e) *be able to receive aural information from the crew and to communicate that information to other passengers orally;*
- (f) *be of a minimum age (as established by the State or the operator) to ensure that he/she has the physical, cognitive and sensory capacity to operate the exit;*

² FAR § 121.585

- (g) not be responsible for another person, as this can hinder the opening of the exit;*
- (h) not be travelling with any animal in the cabin (service, emotional, and/or pet);*
- (i) not have a condition that might cause him/her harm by opening the exit; and*
- (j) not have any other condition that might slow the opening of the exit, the flow of passengers or impede the pathway.*

5.4.2 *The operator's procedures should clearly indicate persons who may not, under any circumstance, occupy an emergency exit row seat. These include the following:*

- (a) passengers who do not/will not accept responsibility for the emergency exit;*
- (b) passengers who do not meet the criteria as listed in section 5.4.1(above); and*
- (c) passengers under escort, such as inadmissible persons, deportees or prisoners.*

5.5 The relevant part of rule 121.81(1-6) states:

Each person performing an air operation shall ensure that-

- (1) passengers are seated where, in the event of an emergency evacuation, they will not hinder evacuation from the aeroplane; and*
- (2) any passenger who appears to be under the influence of alcohol or drugs or exhibits behavioural characteristics, to the extent where the safety of the aeroplane or its occupants is likely to be endangered, is refused embarkation or, where appropriate, removed from the aeroplane; and*
- (3) disabled passengers are appropriately cared for, including allocation of appropriate seating positions and handling assistance in the event of an emergency; and*
- (4) children under the age of 15 years, and adults with an infant, are not seated in any seat row next to an emergency exit; and*
- (5) escorted passengers do not constitute a safety hazard to other passengers or to the aeroplane, and that prior arrangements for their carriage have been made in accordance with procedures specified in the certificate holder's exposition; and*
- (6) the senior flight attendant, or the pilot-in-command, is notified when a disabled or escorted person is to be carried on board the aeroplane.*

6. GM - Language Requirements

6.1 Time is critical during an emergency situation. In addition to operating the emergency exit, passengers seated in an emergency exit row must understand the verbal commands of the crew during the evacuation process. These commands vary depending on the nature and location of the accident, potential fire, or other danger outside or inside the aircraft. Therefore, it is critical that passengers seated in emergency exit rows understand all commands of the crew (e.g. when to, and when not to, open exits).

6.2 The unstaffed exit row briefing should be conducted in English but may be conducted in any language that is mutually understood by both the cabin crew member and the passengers. It is recommended that operators have procedures in place, where possible, to ensure that the exit row briefing is conducted in a language that is understood by all passengers seated in the exit row.

6.3 Operators should also have procedures to ensure that the passenger briefing is understood in the language given and request a verbal acknowledgement rather than just a head nod.

7. GM - Preparedness of Able-bodied Passengers seated in an Emergency Exit Row

7.1 It is generally understood that a passenger's lack of preparedness to act appropriately during an evacuation may be a serious issue. Uninformed passengers may have difficulties in operating emergency exits or knowing when not to open the exit and potentially compromising the success of the evacuation. Therefore, ABP should be given a full briefing specific to the exit they are seated beside, so that in the event of an emergency in which a crew member is not available to operate the exit, the ABP can be called upon to perform the following.

- (a) Be able to understand the language of the cabin crew and be able to communicate to the crew and passengers.
- (b) Follow oral directions and hand signals given by cabin crew.
- (c) Locate the emergency exit.
- (d) Assess whether opening the emergency exit will increase the hazards to which passengers may be exposed.
- (e) Operate the emergency exit.
- (f) Stow or remove the exit so that it will not impede the exit.
- (g) Activate the slide if required.
- (h) Pass expeditiously through the emergency exit.
- (i) Evacuate from the aircraft.

8. GM - Briefing of Passengers Seated in an Exit Row

8.1 Rule 91.211 states that every passenger must receive a briefing. The briefing is part of pre-departure duties.

8.2 Briefings are an integral part of passenger safety and, as such, an educational opportunity. Specific unstaffed exit row briefings should be included as part of the operator's procedures, to provide the necessary information to passengers on the operation of exits and the

responsibilities of sitting in emergency exit rows where cabin crew are not present. These briefings lead to increased passenger awareness, improved performance in an evacuation, and a higher level of safety.³

8.3 The safety briefing to all passengers must include the emergency evacuation of the aircraft and must ensure that passengers have been briefed on the location and means for opening the passenger entry doors and emergency exits. Safety briefing cards are often used to supplement the briefing with diagrams and methods of operating the emergency exits. These diagrams must be pertinent to the aircraft type and model that the safety cards are carried on and must be consistent with the directions of the decal that is on the doors and exits.

8.4 Passengers seated in emergency exit rows, where no cabin crew are located should be briefed on how to open the exit in the event of an emergency.

8.5 An emergency exit briefing should also be provided in cases where one cabin crew member controls a pair of exits. To ensure there is no confusion; where a pair of exits is manned by a single flight attendant, and where the responsibility remains with that flight attendant to open both exits in an emergency, the ABP should be briefed that it is the responsibility of the flight attendant to open both exits. Along with the briefing points below, the ABP should be advised that they would only open the exit if the flight attendant is unable to or if they were directed by crew.

8.6 A full briefing should be provided to these passengers. This can be conducted by:

- (a) a cabin crew member verbally, or
- (b) a presentation on an in-flight entertainment screen or acceptable portable electronic device, or
- (c) as a minimum, a specific safety card at an emergency exit which is available to passengers seated either next to or immediately behind the emergency exit.

8.7 The emergency exit briefing should contain instructions on the operation of the exit, assessment of surrounding conditions for the safe use of the exit and recognition of emergency commands given by the crew. Passenger(s) should be reminded to review the safety briefing card. Passenger(s) should communicate with the crew in the same language to ensure mutual understanding and should verbally acknowledge understanding of the instructions.

8.8 This has been adopted as best aviation practice by most airlines and is recommended to be included in an airlines procedures in their exposition.

8.9 Operators should require passengers to give their undivided attention and focus to the briefing. For verbal briefings, cabin crew need to ensure the passengers stop everything they are doing before the briefing is given. This includes putting down reading and writing materials, portable electronic devices, and removing any form of ear phones or ear plugs.

8.10 The main points that should be briefed on the ground to an able-bodied passenger seated in the emergency exit row are as follows.

³ ICAO Doc 10086, Manual on Information and Instructions for Passenger Safety, First Edition, 2018

- (a) Not to open the exit unless commanded to (unless imminent danger where if exit is not immediate, life is at risk).
- (b) What the signal/command is that will be given from the crew to operate the exit i.e. on the command "EVACUATE, EVACUATE".
- (c) When the exit must not be opened.
i.e. Fire / water - when opening would increase the hazards to which passengers would be exposed to.
- (d) How to operate the exit (as applicable to the exit)
e.g. *"check outside for hazards, remove the cover flap, pull down on the control handle, pull the exit top inwards towards you then throw it out the opening forward of the aircraft"* or *"the exit will automatically lift up"* etc.
- (e) Instructions on what to do once the exit is open (as applicable to the exit)
e.g. *"leg first through the exit, follow the arrows on the wing"*, for exits with a slide, *"wait for slide to inflate, jump and slide, move well away"* etc.

8.11 In a prepared emergency, cabin crew can give more detailed instructions.

8.12 The cabin crew need to be satisfied that:

- (a) the persons selected to be ABPs at the exits are willing and able
- (b) they have asked the persons at the exits if they have questions about what was covered in the briefing and that they have appropriately answered any questions
- (c) they have instructed the person at the exit to read over the exit operating instructions for the exit, on the back of the seat or on the briefing card.

NOTE: *all instructions should be pertinent to the specific aircraft, and there should not be differing instructions on the safety cards to what is decalated at the exit. The safety instruction should provide a clear, pictorial display that addresses the appropriate requirements of rule 91.211 and represents the actual aircraft being operated.*

NOTE: *On embarkation, many flight attendants direct the passengers to their seats by telling them their seat is on the left or right of the aircraft. For passengers who have not boarded from the aft of the aircraft, confusion may take place in an emergency, as when they are boarding from the front of the aircraft they are actually facing the aft, but when seated, they are facing forward. As such, they are on the opposite side of the aircraft to what they have been told when boarding. A passenger in a stressful situation may get confused and their human performance may be effected. Therefore, it is advisable to remind passengers who are seated beside an exit, what side of the aircraft they are on. This way, if commanded in an emergency, to only open exits on the left or right of the aircraft there will be no confusion.*

9. GM - Ground Handling Operating Responsibilities

9.1 The aircraft operator is responsible for ensuring that ground staff are trained and competent in the following.

- (a) Assigning seats prior to boarding consistent with the exit seating criteria. Ensuring special category passengers are not assigned seats beside the exits. This includes persons less than 15 years of age, and adults with an infant.⁴
- (b) Determining the suitability of each person it permits to occupy an exit seat. This includes screening out passengers who use electronic media that allows passengers to select exit seats and checking in without going through an employee of the company.
- (c) Restrictions on a passenger occupying an exit seat if the operator determines that the person lacks sufficient mobility, strength and dexterity in both arms and hands, and both legs to reach upward, sideways, and downward to the location of emergency exit and exit-slide operating mechanism.
- (d) Designating exit seats for each passenger seating configuration in its fleet.
- (e) Informing the public with information in regard to exit row seating.
- (f) Restrictions on a passenger occupying an exit seat if the operator determines that the person lacks the ability to read and understand instructions related to emergency evacuation provided by the operator in printed or graphic form or the ability to understand signalled or oral crew commands.
- (g) Restrictions on a passenger occupying an exit seat if the operator determines that the person has a condition or responsibilities, such as caring for small children that might prevent the person from performing one or more of the applicable functions.
- (h) Restrictions on a passenger occupying an exit seat if the operator determines that the person lacks the ability to adequately understand information orally (in the language of the crew or other passengers).

10. GM - Crew Responsibilities

10.1 The aircraft operator is responsible for ensuring that the cabin crew are trained and competent to deliver the briefing.

10.2. On each flight, it is recommended that the crew action on the following.

- (a) Ensure there are ABPs seated with direct access to each unstaffed exit.
- (b) Ensure where a single crew member is responsible for a pair of exits, that at least one ABP is seated in the nearest seat to the exit which the crew member is not directly seated beside.

⁴ Rule 91.211(4)

- (c) Brief passengers seated adjacent to an exit door or emergency exit on the operation of those exits. Those passengers must be “able”, and the cabin crew should receive a verbal acknowledgement of their acceptance of the additional responsibilities associated with occupying those seats.
- (d) Draw attention to the briefing cards, and instructions on seatbacks or at the exits.
- (e) Re-seat passengers that are not willing to assist or are not considered suitable.
- (f) Deliver the briefing in a clear and concise manner, using simple terms.

NOTE: Should a passenger that is seated beside an exit be identified as having consumed too much alcohol, they should be resealed away from the exit as they are no longer considered an able-bodied passenger as their reaction times and clarity may have been affected. An ABP must then replace the passenger and receive the full emergency exit briefing.

11. GM - Summary

11.1 It is recommended that the seats with direct access to emergency exits that are not covered by operating cabin crew, or where one cabin crew member is responsible for a pair of exits are always occupied by an ABP or passengering crew in the nearest seat to the exit during TTL. ABP seated by emergency exits should receive a full briefing on the operation and use of the exit should an emergency situation require them to operate the exit. Thus, the risk of uncommanded opening of exits with potentially serious consequences will be reduced. These passengers will be prepared for the active role they may play in an emergency by assisting the cabin crew, evaluating the conditions and operating the exit if required in an emergency evacuation.

12. Appendix

12.1 Exit row access interference and obstruction

12.1 Hand Luggage

12.1.1 Rule 91.213 states that:

A person operating an aircraft, other than a balloon, must ensure that, before take-off or landing, all passenger baggage aboard the aircraft is stowed away—

- (1) *in a baggage locker; or*
- (2) *under a passenger seat in such a way that it cannot—*
 - (i) *slide forward under crash impact; or*
 - (ii) *hinder evacuation of the aircraft in the event of an emergency.*

12.1.2 Retrieval of personal items may impede the safe evacuation of passengers (and crew). Further, passengers' hand luggage being taken or thrown out an exit has the potential to injure others and or damaging the slide itself. Therefore, along with meeting the requirements of rule 91.213, it is recommended that operators include a line in the pre-flight safety briefing telling passengers to leave baggage and personal belongings behind during an evacuation.

12.2 Seatbacks

12.2.1 Interference and obstruction in opening and evacuating through an exit could be caused by reclined seats. The CAA follows⁵ The Code of Federal Regulations, *Part 25—Airworthiness standards: Transport category airplanes §25.813Emergency exit access*, which has stringent requirements related to the interference and obstruction of exit rows.

⁵ Rule 21 Appendix C (a)(1)(ii)