Chapter 14—Emergency evacuation demonstrations and procedural requirements

Division 1—General emergency evacuation procedure requirements

14.01 Scope of Chapter 14

This Chapter:

- (a) is made for subregulation 121.755(1) of CASR; and
- (b) prescribes requirements for emergency evacuation procedures in relation to an aeroplane and a flight.

14.02 General requirements

The emergency evacuation procedures must:

- (a) account for the aeroplane carrying the number of passengers that corresponds to the aeroplane's maximum operational passenger seat configuration; and
- (b) provide for evacuations on ground and in water (ditching); and
- (c) be realistic, capable of being practically accomplished and such as to ensure that any reasonably anticipated emergency can be adequately handled; and
- (d) take into consideration the possible incapacitation of individual crew members.

14.03 Crew members, emergency exits and cabin configuration etc.

The emergency evacuation procedures must be appropriate having regard to the following matters:

- (a) the number of crew members;
- (b) the locations on the aeroplane at which a crew member is assigned;
- (c) the emergency evacuation duties and procedures assigned to each crew member;
- (d) the number, location, type of emergency exit or type of opening mechanism on an emergency exit available for evacuation in the aeroplane;
- (e) if the aeroplane is required by section 11.62 to carry one or more life rafts—the location of life rafts;
- (f) the way the passenger cabin interior configuration affects the emergency evacuation of passengers.

Division 2—Aeroplanes carrying more than 44 passengers

14.04 Application etc.

- (1) This Division applies in relation to an aeroplane that has a maximum operational seating configuration of more than 44 passengers.
- (2) The requirements of this Division are in addition to the requirements in Division 1 of this Chapter.

14.05 Emergency evacuation procedures

- (1) An operator's emergency evacuation procedures for an aeroplane must ensure the crew members can achieve an evacuation capability at least equivalent to that achieved in an emergency evacuation demonstration that:
 - (a) was conducted by the aeroplane's manufacturer for the purpose of the type certification of the aeroplane; and
 - (b) meets the requirements of regulation 25.803 of the FARs, CS-25.803, or other requirements that CASA approves, in writing, as being of an equivalent standard.
- (2) If the aeroplane is required under section 11.62 to carry one or more life rafts, the emergency evacuation procedures related to the ditching of the aeroplane must ensure the removal of rafts and the evacuation of the occupants of the aeroplane will be conducted in an orderly and expeditious manner.
- (3) The emergency exits identified as being the primary responsibility of cabin crew members for the purposes of the emergency evacuation demonstration mentioned in subsection (1) must continue to be required, by the emergency evacuation procedures for the aeroplane, to be the primary responsibility of cabin crew members.
- (4) To avoid doubt, the requirement in subsection (3) does not prevent additional emergency exits becoming the primary responsibility of cabin crew members under the emergency evacuation procedures.

14.06 Requirement to conduct demonstrations

(1) An operator must demonstrate to CASA the emergency evacuation procedures for an aeroplane to the extent required by this Division.

Note:

The demonstration of emergency evacuation procedures required by this Division is a demonstration commonly understood to be a "partial" emergency evacuation demonstration. This is because it is not the full emergency evacuation demonstration that is required as part of an aircraft's initial type certification.

- (2) A demonstration of the emergency evacuation procedures in relation to an aeroplane must be conducted:
 - (a) before the type and model of aeroplane is operated in an Australian air transport operation by an operator; and

- (b) before the aeroplane is operated under an Australian air transport AOC following a change listed below that has not previously been demonstrated to CASA for the aeroplane:
 - (i) a reduction in the number of cabin crew members assigned to duty for the aeroplane;
 - (ii) a change to the locations on the aeroplane at which a cabin crew member is assigned, or to the crew's emergency evacuation duties and procedures;
 - (iii) a change to the number, location, type of emergency exit or type of opening mechanism on an emergency exit that is available for evacuation of the aeroplane.

Ditching procedures

- (3) If the aeroplane is required under section 11.62 to carry one or more life rafts, CASA may require the operator, by notice in writing, to conduct a demonstration of the procedures related to the ditching of the aeroplane (the *ditching procedures*).
- (4) In considering whether to require a demonstration of the ditching procedures, CASA may take into account:
 - (a) the availability and realism of facilities, cabin training devices and equipment used by the operator for training crew members on emergency and safety equipment and emergency procedures; and
 - (b) any ditching demonstrations the operator has carried out on an aeroplane of a similar type; and
 - (c) any other factor CASA considers relevant.
- (5) A demonstration of ditching procedures may be conducted:
 - (a) during the emergency evacuation demonstration required under subsection (2); or
 - (b) at another time, as directed by CASA.

Note: As a matter of normal practice, CASA will work with an operator to identify a

mutually agreeable time and place for the demonstration of ditching procedures.

Ultimately, CASA can provide a direction as to the time and place even where no such agreement can be reached.

14.07 Demonstration requirements

- (1) A demonstration to CASA of the emergency evacuation procedures of the aeroplane, including the ditching procedures if required under subsection 14.06(3), must be conducted in simulated emergency conditions.
- (2) Each crew member who participates in the demonstration must:
 - (a) have assigned duties for the type and model of aeroplane; and

- (b) have been selected at random by CASA from a list of crew for the aeroplane compiled by the operator:
 - (i) for the purpose of testing the procedures with members of the crew who do not have an above average level of experience or exposure to emergency evacuation requirements; and
 - (ii) given to CASA; and
- (c) have been assessed by the operator as competent to perform duties relevant to carrying out the emergency evacuation procedures and associated safety briefings for the type and model of aeroplane.
- (3) The operator must not cause the demonstration to have been practiced, rehearsed with, or described to, a participant, except as mentioned in subsection (4).
- (4) For the purposes of subsection (3), a participant may be advised only that he or she will be participating in an evaluation of safety procedures.

14.08 Standards for demonstrations

- (1) CASA must be satisfied that the emergency evacuation procedures for an aeroplane would enable the crew members to achieve the requirement in subsection 14.05(1).
- (2) A demonstration of the emergency evacuation procedures for the aeroplane must also meet the following standards:
 - (a) the cabin crew members, using the operator's emergency evacuation procedures, must:
 - (i) open 50% of the required floor level emergency exits; and
 - (ii) open 50% of the required non-floor level emergency exits;
 - (b) the emergency exits opened for the purposes of paragraph (a) must not include an exit if CASA has (for the purposes of the demonstration) identified that an unsafe condition exists outside the exit;
 - (c) the emergency exits must be ready for use within 15 seconds from the prearranged signal notified to the operator.
- (3) For the purposes of subsection (2), an emergency exit is a *required* emergency exit if:
 - (a) it was present at the time of the emergency demonstration evacuation mentioned in subsection 14.05(1) for the aeroplane; and
 - (b) the operator's procedures provide that the opening of the exit is a primary responsibility of a cabin crew member.

Note: The emergency demonstration evacuation mentioned in subsection 14.05(1) is a full evacuation demonstration conducted for the purposes of the certification of the aeroplane.

- (4) An emergency exit is *ready for use within 15 seconds* if:
 - (a) the emergency exit has been fully opened; and
 - (b) any other means required for a passenger to reach the ground using the exit (for example, an evacuation slide) would be ready within that time; and

(c) where those means are not physically deployed—the time it would take to deploy them for the use of the emergency exit is taken into account in the 15 seconds.

Note:

For example, if it was determined that the slide deployment time for a type of aeroplane is 4 seconds, the measured time to open the relevant emergency exit would be 11 seconds.

(5) If the operator is required to conduct a demonstration of ditching procedures for the aeroplane, the standard that must be met is that CASA is satisfied the ditching procedures meet the requirement in subsection 14.05(2).

14.09 Manner of conducting demonstration

Emergency evacuation procedures

- (1) A demonstration of the emergency evacuation procedures for an aeroplane must be conducted as follows:
 - (a) either during the dark of the night or during daylight with the dark of the night simulated;
 - (b) the aeroplane is in a normal ground attitude with landing gear extended;
 - (c) the following methods be used to prevent disclosure of the available emergency exits to participants in the demonstrations:
 - (i) stands or ramps be positioned at all of the aeroplane's emergency exits;
 - (ii) if the crew would be able to see the means being used to indicate unusable exits before the signal to evacuation is given—the relevant passenger and cockpit windows are blacked out;
 - (d) the aeroplane's normal electrical power sources are de-energised at the commencement of the evacuation;
 - (e) each item of equipment:
 - (i) required to be carried on the aeroplane for the flight by Chapter 11;
 - (ii) relevant to the conduct of an emergency evacuation demonstration under this Division;

must be fitted to, or carried on, the aeroplane;

- (f) each external door or other exit, and each internal door or curtain, must be in a position to simulate a normal take-off;
- (g) a member of the cabin crew or the flight crew, or any other crew member or member of the operator's personnel who maintains or operates the aeroplane in the normal course of their duties, must not be used as a passenger in the demonstration;
- (h) a passenger is not to be assigned a specific seat except under the direction of CASA:
- (i) if the opening of an emergency exit is not the primary responsibility of a cabin crew member under the emergency evacuation procedures—an employee of the operator is not to be seated next to that exit;
- (j) seatbelts and shoulder harnesses for the participants in the demonstration are fastened:

- (k) the seating density and arrangement of the aeroplane is representative of the maximum operational passenger seat configuration of the aeroplane;
- (l) the crew complement on board is not to exceed the number normally carried, with each crew member to be a member of a regularly scheduled line crew;
- (m) each crew member is seated in the seat that is normally assigned to the person for take-off and is to remain seated until the signal to evacuate is given;
- (n) a crew member or a passenger participating in a demonstration is not given prior knowledge of the emergency exits available for the demonstration;
- (o) the demonstration must not include as a participant a person who has taken part in an evacuation demonstration within the preceding 6 months;
- (p) the pre-take-off procedures included in the operator's exposition are demonstrated, including instructions to follow the directions of crew members, except no instruction can be given on the procedures to be followed in the demonstration;
- (q) no more than 50% of the emergency exits on the sides of the fuselage of an aeroplane are used for the evacuation demonstration;
- (r) at least one exit used for the demonstration is a floor level exit;
- (s) any exit not used for the demonstration must be indicated by red lights, red tape, or other appropriate means, placed outside the exit to indicate fire or other reason for the exit to be unusable;
- (t) the emergency evacuation procedures are to be demonstrated, except that the flight crew must not take an active role in assisting any person inside the cabin during the demonstration.

Demonstration of ditching procedures—other requirements and standards

- (2) If the demonstration includes ditching procedures, the following requirements apply:
 - (a) the demonstration must include:
 - (i) removal of life rafts, and any other equipment required by regulation 121.335 of CASR, from stowage locations; and
 - (ii) taking life rafts and equipment to the appropriate exit; and
 - (iii) any other actions necessary for readying the raft for launching and inflation;
 - (b) if the operator's emergency evacuation procedures require the use of passengers to assist with ditching—the demonstration must include passengers as participants to assist with the ditching in accordance with the procedures;
 - (c) after the ditching signal is given, each crew member and passenger who is participating in the demonstration must, in accordance with the ditching procedures, don a life jacket.

14.10 Demonstrations of ditching procedures only

- (1) This section applies if:
 - (a) CASA requires the operator of the aeroplane to conduct a demonstration of ditching procedures under subsection 14.06(3); and
 - (b) the demonstration of the ditching procedures will be conducted separately to other evacuation procedures.
- (2) The demonstration:
 - (a) despite paragraph 14.09(1)(a), may be conducted under daylight conditions; and
 - (b) is subject to each other applicable requirement mentioned in subsection 14.09(1); and
 - (c) is subject to the requirements in subsection 14.09(2); and
 - (d) may be conducted either using an aeroplane or a cabin training device.
- (3) If a cabin training device is used, it must:
 - (a) be a life-size mock-up of the interior of the aeroplane; and
 - (b) include adequate seats for the use of participants in the demonstration; and
 - (c) include emergency exits that replicate the emergency exits on the aeroplane.