2

Issues arising from the inquiry

The role of crew in maintaining safety and security

2.1 CASA described the role of cabin crew in safety and security as 'a vital link' that maintains and applies the operational procedures of aircraft operators, and calls on law enforcement where required.[1] The Department of Infrastructure and Transport's Office of Transport Security agreed with the description of cabin crew as 'one strand in a multi-stranded approach to security'.[2]

2.2 Alliance Airlines noted that crew members have the primary role of dealing with emergency or abnormal conditions in the passenger cabin, and were responsible for the control and evacuation of passengers in an emergency.[3]

2.3 The FAAA expanded on this role, suggesting the crew are the 'eyes and ears in the cabin' for pilots now that flight deck doors are locked.[4] Although the Committee heard different perspectives on the historical role of pilots during security incidents,[5] it was agreed that now that cockpit doors are locked at all times during flight, pilots have no role in managing incidents in the cabin. Mr Tony Maddern, representing Alliance Airlines and the Regional Aviation Association of Australia, advised that 'in the past, we used to be able to send the flight engineer back to look after any

1 Civil Aviation Safety Authority, *Submission 5*, p. 8.

2 Mr Peter Robertson, *Committee Hansard*, 19 May 2011, Sydney, p. 57.

3 Alliance Airlines, *Submission 1*, p. 8.

4 Flight Attendants' Association of Australia, *Submission 10*, p. 12.

5 Flight Attendants' Association of Australia, *Submission 10*, p. 12; Mr Tony Maddern, *Committee Hansard*, 19 May 2011, Sydney, p. 46.

trouble-makers. We do not have flight engineers there anymore, so it is up to the cabin crew.'[6] Mr Ken Lewis confirmed the Committee's observation that a reduction in the number of crew who may be able to assist if required had already occurred, when 'the engineer was replaced by a computer'.[7]

2.4 The FAAA's supplementary submission cited numerous reports from cabin crew members of instances in which their safety and security tasks had been rushed or not completed due to low staffing levels and time pressures before takeoff while operating under the 1:50 ratio.[8] The FAAA also noted that 'dealing with an incident is only one aspect, *controlling* 50 passengers single-handedly is not feasible from either a security or safety perspective'.[9]

2.5 Also addressing security, the Transport Workers Union noted:

> Cabin crew are trained to monitor passengers in respect to the security and safety of an aircraft and its occupants. The risks are substantially increased when a smaller overall cabin crew is involved.[10]

2.6 The Regional Aviation Association of Australia indicated that the 1:36 ratio did not provide any substantive safety or security benefit when compared to operations under a ratio of 1:50.[11] This view was supported by Alliance Airlines, who suggested the 1:36 rule required more crew than are demonstrably required to meet the safety requirements for the aircraft.[12] Cobham Aviation also indicated that it was:

> … unreasonable to think that even at a 1:36 passenger ratio that the Cabin Crew team could completely control a security event without passenger intervention.[13]

2.7 Addressing the use of explosive devices on aircraft, Alliance Airlines suggested crew were poorly placed to identify and intervene against such threats.[14] Alliance suggested that passengers are now the 'front line' of defence against explosive devices on aircraft, and were better placed to

6 Mr Tony Maddern, *Committee Hansard*, 19 May 2011, Sydney, p. 46.
7 Mr Ken Lewis, *Committee Hansard*, 25 May 2011, Canberra, p. 8.
8 Flight Attendants' Association of Australia, *Supplementary Submission 10.1*, pp. 4–5.
9 Flight Attendants' Association of Australia, *Submission 10*, p. 12.
10 Transport Workers Union, *Submission 11*, p. 4.
11 Regional Aviation Association of Australia, *Submission 6*, p. 2.
12 Alliance Airlines, *Submission 1*, p. 7.
13 Cobham Aviation, *Submission 3*, p. 1.
14 Alliance Airlines, *Submission 1*, p. 9.

identify aberrant behaviour, and that passengers were now also willing to actively intervene to prevent threats such as these.[15]

2.8 The Australian Airline Pilots' Association noted the lack of focus on cabin security in CASA's proposal to alter cabin crew ratios:

> The issue of security is one which seems to have been bypassed in the decision regarding a change of cabin crew ratio. All of the justification to date has been centred on the ability to evacuate the aircraft in the required time as determined by the manufacturer or the state. There is no indication of the effect of a reduction in cabin crew numbers on the security of the aircraft or on the handling of an inflight security incident.[16]

2.9 The Committee asked Mr Peter Robertson of the Office of Transport Security whether there was any evidence to indicate whether one ratio was superior to another in terms of security. Mr Robertson replied that there was no evidence one way or the other, and that no assurances one way or the other could be given without evidence.[17]

2.10 As was noted earlier, advice from the Australian Transport Safety Bureau (ATSB) was cited by CASA as a particular reason for its 2002 decision to retain the 1:36 cabin crew to passenger ratio.[18] The Committee regrets that the ATSB chose not to participate in the current inquiry.[19]

Measuring ratios and safety through evacuation demonstrations

2.11 Throughout the inquiry, the Committee heard about the use of partial evacuation demonstrations to demonstrate the effectiveness of aircraft evacuations under reduced cabin crew numbers. CASA requires an operator seeking a 1:36 exemption to 'prove' that a partial evacuation can be achieved with 'an acceptable level of safety (or better)'.[20]

15 Alliance Airlines, *Submission 1*, p. 9.

16 Australian Airline Pilots' Association, *Submission 9*, p. 4.

17 Mr Peter Robertson, *Committee Hansard*, 19 May 2011, Sydney, p. 55, 57.

18 Civil Aviation Safety Authority, 'Notice of Proposed Rule Making: Air Transport Operations — Large Aeroplanes: Proposed Part 121A of the Civil Aviation Safety Regulations (CSAR)', *Document NPRM 0211OS*, April 2002, p. A41.

19 The ATSB wrote to the Committee to advise that it would not be able to make a contribution directly relating to the inquiry's terms of reference, and that its investigations to date had not raised issues relating to cabin crew ratios.

20 Civil Aviation Safety Authority, *Submission 5*, p. 6.

2.12 A partial evacuation demonstration requires part of an aircraft to be populated with passengers, crew placed on board, and 50 per cent of the doors to be made unavailable for evacuation. Lights are also switched off to replicate a possible evacuation scenario. Passengers and crew are not aware ahead of time which doors are unavailable. During the demonstration, the airline is required to demonstrate that the aircraft can be evacuated safely within 90 seconds.[21] For safety purposes, passengers disembark via stairs, rather than through the deployment of slides.

2.13 The purpose of this style of evacuation demonstration is to replicate the worst case scenario, in which an aircraft is on the ground and on fire.[22] Where required, airlines also conduct a demonstration simulating a ditching.[23]

2.14 In its submission, CASA advised that demonstrations are conducted under pass/fail criteria, and that in the event of a failed first attempt, airlines are given a second opportunity to conduct an evacuation demonstration on the same day using new crew and passengers.[24]

2.15 CASA's submission noted that one operator had failed at both attempts, and was able to try again several months later after a full investigation of the unsatisfactory result, and amendment to procedures and crew training. This second demonstration was deemed successful.[25]

2.16 On further investigation, the Committee learned from CASA that there were deficiencies in crew performance, as the simulation was one of a ditching, and a life raft was left on board.[26] The Committee was further informed that an airline had recently failed a demonstration twice due to insufficient crew awareness of procedures.[27]

2.17 The Committee asked whether there had been any full aircraft evacuations undertaken in Australia. While Mr Lewis recalled that a full evacuation exercise had been conducted in 1972, CASA, in its supplementary submission, advised the last full evacuations were conducted in 1988, with one demonstration considered to be a failure due to cabin crew training

21 Mr Terry Farquharson, *Committee Hansard*, 19 May 2011, Sydney, p. 9.
22 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, p. 9.
23 Civil Aviation Safety Authority, *Submission 5*, p. 11.
24 Civil Aviation Safety Authority, *Submission 5*, pp. 6–7.
25 Civil Aviation Safety Authority, *Submission 5*, p. 7.
26 Mr Grant Howard, *Committee Hansard*, 19 May 2011, Sydney, p. 10.
27 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, p. 10.

deficiencies.[28] A second evacuation was then undertaken several weeks later and was deemed to be successful.[29]

2.18 Evacuation trials were criticised by several witnesses and submitters. The FAAA said of the trials:

> Emergency evacuation trials are conducted in very controlled environments and do not reflect an actual emergency evacuation as emergency conditions are not duplicated. The crew are tutored, prepared and practiced prior to the demonstration. The 'passengers' are fit, prepared, do not include children, the elderly, the frightened, injured, disabled or panicked. Cabin crew incapacity/redundancy is not factored into an evacuation trial. There is no smoke or fire and the aircraft is upright and intact. If a failure occurs, there is a re-run.[30]

2.19 Ms Beverley Maunsell was also critical of evacuation trials, noting in her submission:

> They are not a legitimate representation of the typical passenger load on a commercial flight or a real emergency evacuation. There are no elderly passengers, no wheelchairs, no physical, mental, hearing, or sight impaired passengers, no mothers with multiple children and infants. All of the above mentioned people are excluded from evacuation trials for litigation and safety reasons.[31]

2.20 Ms Maunsell described evacuation trials as unrepresentative of real life evacuations, noting that in a major accident in 1985 in Manchester, United Kingdom, in which an aircraft caught fire on the tarmac after a failed take off, it took the last passenger five and a half minutes to evacuate the aircraft. A prevous evacuation demonstration had seen the aircraft cleared in 75 seconds.[32]

2.21 In citing the Manchester accident, Tony Maddern noted that no recommendation had been made to alter the UK cabin crew ratio of 1:50 that was in place at the time and remains in place to this day.[33] The Committee notes, however, that in the Manchester accident the aircraft had 131 passengers and four members of cabin crew, operating at a

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28 Mr Lewis, *Committee Hansard*, 25 May 2011, Canberra, pp. 9-10; Civil Aviation Safety Authority, *Supplementary Submission 5.1*, p. 3.

29 Civil Aviation Safety Authority, *Supplementary Submission 5.1*, p. 3.

30 Flight Attendants' Association of Australia, *Submission 10*, p. 7.

31 Ms Beverley Maunsell, *Submission 2*, p. 5.

32 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 18.

33 Mr Tony Maddern, *Committee Hansard*, 19 May 2011, Sydney, p. 45.

nominal ratio of 1:33. In this accident, the two members of cabin crew at the rear of the aircraft died, and the two crew members at the front of the aircraft directed the evacuation.[34]

2.22 In criticising live evacuation trials, Ms Maunsell instead noted the value of computer modelling:

> I do not think the trials mean anything. They are meaningless. If you were serious about wanting to know whether people could get out then you need to do computer modelling — they take it and put [in] old people and people with children. They put baggage all over the place. They simulate.[35]

2.23 Ms Maunsell continued, noting that evacuation trials were used as a basis for detailed computer modelling for the Airbus A380:

> They [Airbus] did both. They do the evacuations where they use all the people from the Hamburg gym or whatever it was and all the staff from Airbus and then use that as the basis for setting up the computer program to model. They then put in all the problems. Those evacuation trials have a basis if they are used with computer modelling, but they have no basis on their own.[36]

2.24 The Committee understands that a full evacuation demonstration requiring evacuation via emergency slide is unduly dangerous, having heard evidence of serious injuries and even death occurring through the use of slides.[37]

2.25 While the Committee understands the need to reduce risks in evacuation trials by using fit and healthy people, it is also of the belief that these trials fail to take into account the actual demographic makeup of Australian domestic passenger flights.

2.26 The Committee notes evidence received about the changing nature of passenger demographics in recent years. Beverley Maunsell noted that demographic changes in the travelling passenger cohort have included many more passengers with disabilities.[38]

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34 Air Accidents Investigation Branch, United Kingdom Department of Transport, 'Report on the accident to Boeing 737-236, G-BGJL, at Manchester Airport on 22 August 1985', *Report No: 8/1988*, 15 December 1988, p. 9.

35 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 20.

36 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 21.

37 Mr Stuart Aggs, *Committee Hansard*, 19 May 2011, Sydney, p. 41; Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 20.

38 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 22.

2.27 In its submission, the FAAA cited the higher numbers of passengers (such as disabled, elderly, unaccompanied children or parents with infants) requiring more help than the average passenger, and argued that a reduction in cabin crew on the aircraft would impact on the efficiency of evacuation.[39] Ms Carol Locket, representing the FAAA, noted that there had been an increase in carry-on luggage,[40] which would make evacuation of an aircraft even more difficult in the event of an emergency.

2.28 The Committee also heard that the behaviour of passengers had changed:

> … we are seeing a lot more aggression. I think we see that in the general public, but it is very much so on an aircraft where people are not in control. They have great trouble taking direction sometimes and the aggression is there. We have a lot more instances of drug related behaviour; that is much more common.[41]

2.29 Evidence supplied by the Qantas Group indicated that there had been an increase in reported incidents aboard Qantas flights between January 2007 and May 2011. While the majority of cases concerned passenger use of mobile phones and personal electronic devices, there were also increases in passenger non-compliance with cabin crew directions.[42]

The role of passengers in emergency evacuations

2.30 The Committee received several submissions that discussed the role of passengers in the opening of emergency exits, which may be more likely to be required during the evacuation of an aircraft crewed at the 1:50 ratio.

2.31 The FAAA noted in its submission that knowing the correct circumstances in which a door should be opened for evacuation was of critical importance. It advised that passengers were not trained to recognise the potentially fatal consequences of opening a door into fire, smoke or water.[43] This point was supported by the Transport Workers Union, which described a reliance on untrained passengers, who may have language and communication difficulties, to assess and operate emergency exits as 'a diminished level of safety and an unacceptable risk'.[44]

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39 Flight Attendants' Association of Australia, *Submission 10*, p. 9.

40 Ms Carol Locket, *Committee Hansard*, 25 May 2011, Canberra, p. 9.

41 Ms Carol Locket, *Committee Hansard*, 25 May 2011, Canberra, p. 9.

42 Qantas Group, *Supplementary Submission 4.1*, p. 7.

43 Flight Attendants' Association of Australia, *Submission 10*, p. 8.

44 Transport Workers Union, *Submission 11*, p. 5.

2.32 Beverley Maunsell cited several documented cases from the United States National Transport Safety Bureau of passengers opening doors into flames or allowing smoke into the cabin when operating doors in an emergency.[45]

2.33 In its submission, the Australian Airline Pilots' Association chronicled several incidents in which passengers had acted contrary to instructions or, in the absence of crew supervision, had inappropriately opened exits or failed to find exits during an evacuation.[46]

2.34 The FAAA also noted research conducted at the University of Greenwich that indicated that passengers travelled further to deplane, and chose non-optimal exits, without the guidance of crew members.[47]

2.35 Examining the role of cabin crew in an evacuation, Beverley Maunsell suggested it would not be physically possible for one member of crew to control an evacuation at two adjacent doors at the same time, describing the notion as 'farcical'.[48] Evidence provided by the FAAA from cabin crew members illustrated the possibility of passengers being responsible for both front doors on the A321 if the single crew member was incapacitated in an accident.[49]

2.36 Countering this concern, CASA cited research carried out by Cranfield University which had resulted in 'virtually identical' mean evacuation times whether there was one member of cabin crew or two members of cabin crew controlling passenger exit from adjacent doors.[50]

2.37 Airline safety advisor Ken Lewis also expressed concern about an unattended main entry door, even in a non-emergency situation, noting a catastrophic incident was possible even as an aircraft taxied after landing if a passenger successfully opened a door at the front of an aircraft.[51]

2.38 Looking at the role and responsibility of passengers in an evacuation, CASA expressed an understanding that Boeing and Airbus had increasingly 'put some dependence on able-bodied passengers being able to assist in the evacuation'.[52] This provision relates to passengers seated in the over-wing exit row. The FAAA advised that over-wing 'self-help' exits

45 Ms Beverley Maunsell, *Submission 2*, p. 7.
46 Australian Airline Pilots' Association, *Submission 9*, p. 2.
47 Flight Attendants' Association of Australia, *Submission 10*, p. 8.
48 Ms Beverley Maunsell, *Submission 2*, p. 5.
49 Flight Attendants Association of Australia, *Supplementary Submission 10.1*, p. 4.
50 Civil Aviation Safety Authority, *Supplementary Submission 5.1*, p. 5.
51 Mr Ken Lewis, *Committee Hansard*, 25 May 2011, Canberra, p. 8.
52 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, p. 5.

are the sole responsibility of passengers, and crew did not assist in opening these exits.[53]

2.39 In its public hearing, the Committee heard evidence that passengers would experience difficulties in opening exit doors, with Beverley Maunsell suggesting 'most people' could not open them.[54] This evidence was supported by Carol Locket, who noted that using the correct technique in opening a door was important, because 'there are certain types of doors where it would not matter how hard you pushed them; if you had not put the handle in the correct position in the first place, they will not open'.[55] When asked directly about whether a passenger with no training would be able to successfully open a door, she replied 'I would say that they would have a very reduced chance of opening that successfully'.[56]

2.40 Addressing this issue in its supplementary submission, CASA noted that in the case of the Airbus A321, the capability of able-bodied passengers to open floor level exits was considered a safety enhancement. Passengers require a safety briefing that includes instructions on how to assess conditions outside of the aircraft, including fire and smoke.[57]

2.41 The Committee discussed the issue of exit row seating, noting that airlines had been known to charge more for exit row seating due to their extra leg room available. It asked witnesses about the assessments performed on potential exit row passengers to determine whether they were able-bodied, and procedures for moving passengers who were not deemed suitable to sit in the exit row.[58]

2.42 The Committee also discussed briefings provided by cabin crew to exit row passengers, noting that the briefings they had witnessed through their travel had on some occasions been insufficient. Virgin Australia described their instructions on operating over-wing exits as 'very detailed', and noted that the passenger is required to confirm that they had understood the briefing.[59]

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53 Flight Attendants' Association of Australia, *Supplementary Submission 10.1*, p. 1.

54 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 21.

55 Ms Carol Locket, *Committee Hansard*, 25 May 2011, Canberra, p. 10.

56 Ms Carol Locket, *Committee Hansard*, 25 May 2011, Canberra, p. 10.

57 Civil Aviation Safety Authority, *Supplementary Submission 5.1*, p. 6.

58 Mr Robert Wood, *Committee Hansard*, 19 May 2011, Sydney, p. 36.

59 Mr Stuart Aggs, *Committee Hansard*, 19 May 2011, Sydney, p. 41.

The role of passengers in security incidents

2.43 As discussed earlier in this chapter, the Committee was advised that passengers have been increasingly willing to intervene in security incidents in the post-September 11 environment.[60]

2.44 The Committee's attention was also drawn to a recent incident aboard Qantas Flight 768 from Perth to Melbourne, in which a passenger is alleged to have assaulted a member of cabin crew, and twice attempted to open the right rear door while in flight.[61]

2.45 The Committee was informed by the Department of Infrastructure and Transport that the number of disruptive passenger events onboard an aircraft in Australia is very low, with an incident on 0.001% of flights per year over the 2008-10 period. The majority of these incidents did not involve attempts to interfere with aviation, and were instead related to alcohol, not following crew instructions, or mental illness. Further, the Department noted in some of these cases, passengers had assisted crew in restraining a disruptive passenger.[62]

Committee comments

2.46 The Committee observed that all sectors of the industry appreciate the role cabin crew members play in both safety *and* security, and considers that cabin security is an important issue that needs to be considered when evaluating cabin crew ratios. Cabin crew are trained professionals who are skilled at evaluating possible security threats at the time of boarding,[63] and access to this expertise should not be reduced without clear evidence that there would be no diminution of passenger safety.

2.47 The Committee considers that the failure of CASA to consider the role cabin crew play in securing the cabin and passengers is unfortunate. The Committee understands that CASA's responsibility is to consider aviation safety; however, the Committee is also of the belief that cabin security is intimately related to cabin safety.

60 Qantas Group, *Submission 4*, p. 11.

61 Steve Butcher, 'Detox for airline accused', *The Age*, 24 May 2011, p. 6.

62 Department of Infrastructure and Transport, *Submission 8*, p. 2.

63 Virgin Australia, *Submission 7*, p. 9.

2.48 This lack of clear consideration of security issues by CASA must be addressed by the regulator. The Committee acknowledges the view of Beverley Maunsell that '… in this business you cannot separate occupational safety, operational safety and security because they are all so intertwined'.[64] Safety and security are different, though closely related matters, and a secure aircraft is a safer aircraft. There needs to be more interaction between CASA and the OTS to determine what constitutes an adequately secure aircraft, and for this determination to be used by CASA in any future review of cabin crew ratios. Accordingly, the Committee recommends:

Recommendation 1

That the Civil Aviation Safety Authority and the Office of Transport Safety work together to determine an appropriate level of passenger compartment security for Australian domestic flights, taking into account previous incidents both in Australia and abroad.

Recommendation 2

That the Civil Aviation Safety Authority consider passenger compartment security in any future review of cabin crew ratios.

2.49 When considering evacuation demonstrations, the Committee understands the reasons that partial evacuations only involve fit and physically able people. However, the Committee has concerns about the significant differences between a controlled demonstration and a real-life emergency, where a more accurate reflection of a population's demographics is included. The Committee considers that the findings of these partial evacuation demonstrations should not be relied upon as accurate representations of an emergency evacuation.

2.50 The Committee sees value in the use of computer modelling to simulate evacuations, and encourages operators to explore using this technology further to demonstrate the effectiveness of their safety procedures.

64 Ms Beverley Maunsell, *Committee Hansard*, 19 May 2011, Sydney, p. 18.

2.51 The Committee was concerned to hear that there is an increasing reliance being placed on passengers to open doors in the case of an emergency, given the relative complexity of the task and the expertise required to assess the situation outside the aircraft.

2.52 It notes the vast majority of casualties in the aforementioned Manchester accident of 1985 died of smoke inhalation, and believes any increased reliance on passengers to operate doors presents potentially hazardous circumstances in the event of an onboard emergency involving fire. It notes in the official report into the accident that passengers operated the over-wing exits incorrectly, leaving them trapped inside the aircraft.[65]

2.53 While Airbus may consider the capability for doors on the A321 to be able to be operated by properly briefed passengers to be a safety enhancement, the Committee is exploring exemptions to a range of aircraft, not just the A321, and notes that briefings on how to operate doors can vary in quality.

2.54 The Committee also notes evidence regarding the higher charges levied for passengers wishing to have extra legroom in exit row seats. The Committee is concerned that any automation of check-in procedures does not reduce the capacity for cabin crew members to assess, before takeoff, the suitability of passengers to occupy an exit row.

2.55 Addressing the issue of passengers and security, the Committee is unconvinced by suggestions that passengers should be relied upon to take part in ensuring the security of the cabin. While it is entirely probable that passengers would assist in ensuring the security of the cabin, including assisting cabin crew to restrain unruly passengers, the Committee remains concerned about an overall reduction of cabin crew numbers based on anecdotal evidence that, post-September 11, passengers are increasingly willing to intervene in security threats.

CASA's review processes

2.56 The Committee inquired about the level of consultation undertaken by CASA before embarking on the NPRM process in relation to cabin crew ratios and expressed concern that consultation with the public may not have been sufficient. CASA replied that they conducted more public consultation than other high-capacity public transport bodies, and that it

65 Air Accidents Investigation Branch, United Kingdom Department of Transport, 'Report on the accident to Boeing 737-236, G-BGJL, at Manchester Airport on 22 August 1985', *Report No: 8/1988*, 15 December 1988, p. 9.

has a Standards Consultative Committee in place which includes operators, unions, and other organisations, including the Australian Passenger Safety Association, as members.[66]

2.57 Other evidence presented to the Committee suggested that there had been no stakeholder or public consultation prior to the granting of exemptions, and that CASA had granted exemptions via delegated legislation in contravention of the previously expressed views of the Parliament.[67]

2.58 In its supplementary submission, CASA advised that it had advertised the NPRM in newspapers and on the CASA website, and that should the NPRM proceed, a report would be prepared and made publicly available to advise of the decision.[68]

2.59 While the Committee makes no comment on the use of delegated legislation to grant exemptions, it does have concerns about the lack of coverage and processes employed by CASA to consult with flight attendants, stakeholders and the general public.

2.60 The Committee notes the submission from the FAAA which urges the public release of hazard identification, risk assessment and mitigation strategies that were performed before the granting of exemptions.[69] The Committee believes it is in the best interests of all, especially the flying public, that CASA's decisions, and the rationale behind them (including submissions made to CASA), are made publicly available in a timely manner. The Committee notes that CASA publishes information after a decision is taken, but believes a more open consultative approach could be taken.

Recommendation 3

That, prior to finalising the process, the Civil Aviation Safety Authority publish on its website all non-confidential submissions made to it through the Notice of Proposed Rule Making process.

2.61 Further, the Committee believes the public consultation mechanism surrounding NPRMs should be expanded when they relate to issues that

66 Mr Greg Hood, *Committee Hansard*, 1 June 2011, Canberra, p. 8.
67 Flight Attendants' Association of Australia, *Submission 10*, pp. 4–5.
68 Civil Aviation Safety Authority, *Supplementary Submission 5.1*, p. 8.
69 Flight Attendants' Association of Australia, *Submission 10*, p. 5.

directly affect passengers, such as cabin crew ratios. The Committee believes that advertising in newspapers and placing information on the CASA website constitutes a minimum level of publicity, and believes CASA could do more to raise the travelling public's awareness of issues that directly affect their flying experience. Accordingly, the Committee recommends:

Recommendation 4

That the Civil Aviation Safety Authority advertise Notices of Proposed Rule Making that directly affect passengers in publications that are widely read by the travelling public, such as in-flight magazines, and that CASA seek submissions from the public into the advertised Notices of Proposed Rule Making.

Training

2.62 The Committee was interested in the level of safety and security training provided to cabin crew and other workers connected to aircraft safety and security.

2.63 The Department of Infrastructure and Transport reported the security requirements contained in the Aviation Transport Security Regulations 2005 in its submission:

- The requirement for aircraft with over 30 seats that are operating a Regular Public Transport or open charter service to have a hardened cockpit door that is locked during flight.
- The requirement for an operator of a prescribed air service to establish and maintain a security training program for crew covering topics such as deciding the seriousness of an occurrence, crew communication and coordination, and appropriate self defence. This satisfies Australia's obligation under Annex 6 of the Chicago Convention in respect of minimum security training topics that an aircraft operator must include in their crew training program.
- The requirement for an aircraft operator's transport security program to address matters including: measures and procedures for handling suspect behaviour by a passenger; procedures for raising the awareness

> and alertness of staff to security threats and their responsibility to report aviation security incidents and breaches; how security awareness training will be given to operational staff; and duties and responsibilities of personnel with security roles.[70]

2.64 The Committee inquired into the role of the Office of Transport Security (a division of the Department of Infrastructure and Transport) in airline staff training. The Department advised that operators were responsible for submitting their transport security programs, including cabin crew training programs, to the Office of Transport Security for approval.[71]

2.65 The Qantas Group noted in its submission that Jetstar cabin crew only receive annual refresher and recurrent emergency procedure training, whilst Qantas cabin crew received twice yearly training in emergency procedures and normal operations, that training was competency based, and that crew were assessed in theoretical and practical knowledge.[72]

2.66 The Qantas Group reported that cabin crew training, rather than numbers, is the determining factor in performing an efficient and safe evacuation.[73]

2.67 Ms Carol Locket of the FAAA reported that security training was being conducted once every two years, rather than yearly, and that the major airlines had been reducing or dispersing the amount of training provided to members of cabin crew.[74]

2.68 The Transport Workers Union noted in its submission:

> … in terms of cabin crew at present there is no one mandated standard of accreditation, qualification and licensing system currently in place. In practical terms this means that the skill, qualification and capacity of cabin crew to handle an in flight emergency or security situation is currently different depending on who you fly with.[75]

2.69 Expanding on the TWU submission, Tony Sheldon advised that there had been an increase in training of his members, but suggested it was inadequate, and that employees had been reprimanded for raising security

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70 Department of Infrastructure and Transport, *Submission 8*, p. 2.

71 Mr Peter Robertson, *Committee Hansard*, 19 May 2011, Sydney, p. 57.

72 Qantas Group, *Submission 4*, p. 9.

73 Qantas Group, *Submission 4*, p. 10.

74 Ms Carol Locket, *Committee Hansard*, 25 May 2011, Canberra, p. 8.

75 Transport Workers Union, *Submission 11*, p. 5.

issues such as unattended baggage that may interfere with the efficient operation of aircraft.[76]

Crew Fatigue

2.70 The FAAA suggested that any reduction in crew should also properly consider flight and duty time limitations, and that Australia did not currently comply with the International Civil Aviation Organisation's (ICAO) Standards and Recommended Practices.[77]

2.71 The Australian Airline Pilots Association noted in its submission that there were currently no legislated flight and duty time limits for cabin crews. They suggested this was a shifting of responsibility from CASA to the operators, and noted the ICAO audit of Australia from 18–28 February 2008 had identified this issue. CASA had agreed with the findings of the audit, noting rest periods were 'only subject to workplace agreements and State-based legislation in relation to occupational health and safety'.[78]

2.72 In the Committee's public hearing, CASA discussed the ICAO fatigue risk management guidelines, noting it had received a draft of the guidelines. Further, CASA advised it had the intention to produce fatigue risk management guidelines, noting there would be wide industry consultation, including with the general public. CASA expressed optimism that the process would cover cabin crews by 2012.[79]

2.73 The Committee inquired whether CASA was satisfied with the fatigue management systems currently put in place by Australian operators. John McCormick of CASA responded:

> If I take that across the whole board as a yes or no question I would say at the moment what we are seeing would lead us to indicate yes. There are certainly fatigue issues out there. There certainly are patterns of flights which are not very user friendly. I think they can be improved. We have done this extensive work with major operators in Australia about some of the patterns that they roster their crew on. That is an ongoing process …[80]

76 Mr Tony Sheldon, *Committee Hansard*, 25 May 2011, Canberra, p. 7.
77 Flight Attendants' Association of Australia, *Submission 10*, pp. 6, 15.
78 Australian Airline Pilots Association, *Submission 9*, p. 4.
79 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, pp. 4–5.
80 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, pp. 8–9.

2.74 Virgin Australia was asked about its fatigue management system, advising that its crew could do up to four sectors per day, but that their duty time limitation was nine hours and 45 minutes operating time.[81]

2.75 Cobham Aviation identified security training and fatigue risk management appraisals as measures to enhance aviation security.[82]

2.76 In its submission, the Transport Workers Union suggested addressing fatigue and risks through mandatory:

- operator commitment to enforceable independent third party risk assessments and compliance audits;
- crew roster patterns, rest and fatigue management systems and enforceable protections;
- operator commitment to whistleblower protections; and
- crew training, accreditation and qualification systems, including mandatory safety security training.[83]

Recommendation 5

That the Civil Aviation Safety Authority ensure that Australia becomes compliant with the International Civil Aviation Organisation's Standards and Recommended Practices relating to cabin crew flight and duty time limitations as a matter of priority.

Airside security and ASIC passes

2.77 While not specifically relating to the issue of cabin crew ratios, the Committee took a broad approach to issues of passenger safety and security, including safe operations at airports. The Committee received evidence at its public hearing of 25 May 2011 held in Canberra relating to airside security practices. Witnesses from the Transport Workers Union (TWU) expressed concern that security screening of employees working airside had not been adequately undertaken.

81 Ms Sophie O'Ferrall, *Committee Hansard*, 19 May 2011, Sydney, p. 42.

82 Cobham Aviation, *Submission 3*, p. 2.

83 Transport Workers Union, *Submission 11*, p. 4.

2.78 Tony Sheldon of the TWU advised the Committee that the process for issuing ASIC (Aviation Security Identification Card) passes is slow, and workers are allowed to work airside without a card until it has been issued. Mr Sheldon noted that the Office of Transport Security endeavoured to issue an ASIC pass within five days, but took up to 20 days to consider those with unclear security histories. He described the concept of a person working airside without security clearance for up to 20 days as 'ludicrous', and noted the potential not just for acts of terror, but also for drug trafficking.[84] Mr Sheldon suggested this issue had arisen because companies did not wish to apply for ASIC passes prior to engaging employees.

2.79 Witnesses from the TWU noted a recent instance at Canberra Airport in which eight employees of a cleaning company were working airside without ASIC checks, including near passenger and VIP aircraft (including the Prime Minister's aircraft).[85] After the witnesses persuaded the Australian Federal Police to investigate the issue further, it was found that a number of the workers were illegally working on student visas.[86] After AFP involvement, the employees were removed from the premises and did not return to work at Canberra Airport.

2.80 In its submission, the TWU suggested the implementation of mandatory safety and security training for all ASIC pass holders, and a security and safety accreditation and portable licensing system for all aviation industry employees, commencing with cabin crew.[87]

2.81 These matters are outside the terms of reference for this inquiry, but the Committee feels they should be recorded for consideration by the Minister.

Committee's overall conclusions

2.82 A central concern for this inquiry was the difference between ratios of 1:36 (crew to passengers) and 1:50 (crew to passenger *seats*), and the difficulties in adequately comparing these, where data is not readily available. Throughout the course of its inquiry, the Committee sought any clear evidence available that compared operations under a cabin crew ratio of

84 Mr Tony Sheldon, *Committee Hansard*, 25 May 2011, Canberra, p. 6.

85 Mr Tony Sheldon, *Committee Hansard*, 25 May 2011, Canberra, p. 8.

86 Mr Grant Smith, *Committee Hansard*, 25 May 2011, Canberra, p. 13.

87 Transport Workers Union, *Submission 11*, p. 4.

1:36 with those under a ratio of 1:50. It sought data for comparison based on Australian operations, and when it became clear this was not available, sought to determine whether there was data comparing Australia to other countries, including Canada, which also has a cabin crew ratio different to the 1:50 used elsewhere.

2.83 Having discussed the issue comprehensively with operators, employee organisations, experts, and the regulator itself, it is clear to the Committee that there are no direct or indirect comparisons that measure the effectiveness of an evacuation exercise using both ratios.

2.84 While it is clear that partial evacuations are of some use in demonstrating the training and operational procedures of operators, the inquiry process has brought forth evidence that suggests partial evacuation demonstrations are, at best, an imprecise measure of the effectiveness of an aircraft evacuation.

2.85 The Committee notes the two separate issues of cabin safety and cabin security. The focus of CASA's proposal on cabin safety is understandable, given that CASA's primary role is one of safety. However, cabin security is a separate, though closely related responsibility of members of cabin crew, and the Committee believes that a security incident can very quickly impact on the safety of an aircraft.

2.86 Further, the Committee notes the criticism of CASA's handling of security issues, and the role played by the Office of Transport Security in assessing the role of cabin crew in security.[88] It understands the demarcation of duties between CASA and the Office of Transport Security, but believes at there is considerable scope, and need, for the agencies to work more closely when assessing the links between safety and security, and the impacts of their respective decisions on these factors.

2.87 The Committee notes with concern the suggestion that passengers are being relied on to be more involved in the safety and security of the cabin, and considers that passengers should not be expected to perform these roles as a matter of first resort. There is no substitute for trained professionals working in the field of safety and security, and there are many reported incidents in which passengers have behaved inappropriately or ineffectively.

2.88 The Committee considers that an increased rate of survivability in the case of air crashes does not justify a reduction in the number of cabin crew on an aircraft. It agrees with the conclusion drawn by the FAAA that greater

88 Mr Tony Sheldon, *Committee Hansard*, 25 May 2011, Canberra, p. 4.

survivor rates make efficient and effective evacuations even more important,[89] and given the likelihood of cabin crew being incapacitated in the event of a crash, a ratio that provides more potential for able crew to effect an evacuation should be supported.

2.89 The Committee believes that any decision to change Australia's cabin crew ratio must be supported by the weight of evidence that there is no diminution of passenger safety and security. Australia has a strong record in aviation safety and security, a record that has been preserved through strong and effective regulation.

2.90 While harmonisation with overseas aviation standards is a desirable outcome, it should not come at the expense of a higher standard. Based on the limited evidence it received, the Committee is not able to support the claim that 1:50 ratio is not a downgrade in safety and security. It cannot therefore support adoption of a 1:50 ratio to fall into line with the United States and European regulators. In short, the Committee believes the case has not been made.

2.91 The Committee acknowledges the concerns of operators about costs, however, it also notes the low cost imposition on a per passenger basis and the evidence presented by the Qantas Group that the cost impacts of the cabin crew ratio are in fact minimal.

2.92 Further, the Committee notes that the issue of cabin crew ratios has been evaluated by the Parliament in various ways over the last ten years, from bipartisan agreement in the House of Representatives Chamber, to Senate reports and discussions in other parliamentary forums. The Committee was very disappointed to hear that CASA had not taken the wishes of the Parliament into account by continuing to grant exemptions despite the Parliament expressing a clear preference for the retention of the 1:36 ratio.

2.93 The Committee was pleased to hear that CASA would fully implement its recommendations,[90] and welcomes CASA's willingness to remove the exemptions were it to be directed to do so.[91] The Committee believes that until the NPRM process is conducted with openness and transparency, that no further exemptions should be granted. The Committee will continue to observe the NPRM processes with interest.

89 Flight Attendants' Association of Australia, *Submission 10*, pp. 9–10.

90 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, p. 14.

91 Mr John McCormick, *Committee Hansard*, 19 May 2011, Sydney, p. 64.

Recommendation 6

That the Civil Aviation Safety Authority cease providing new exemptions to the 1:36 cabin crew ratio currently mandated by Civil Aviation Order 20.16.3, and that all exemptions to the Order currently in place not be renewed upon expiry.

Recommendation 7

That the 1:36 ratio be retained until such a time that it can be demonstrated that a change to a 1:50 cabin crew ratio in Australia will not result in reduced levels of safety or security.

Sharon Bird MP

Chair