

Chair  
Cabinet Policy Committee

## **Response to 8 February 2008 Hijack Attempt**

### **Proposal**

1. This paper recommends the committee agree that, in response to the attempted hijacking on 8 February 2008, officials undertake a feasibility study on whether flight-deck barriers can be fitted to smaller aircraft, increase training requirements of airline and airport staff, and undertake a thorough review of domestic aviation security.

### **Executive Summary**

2. In response to the attempted hijack of a regional passenger aircraft on 8 February 2008, the Civil Aviation Authority (CAA), New Zealand Police (Police) and Aviation Security Service (Avsec) have conducted a preliminary review of domestic aviation security systems.
3. It has been found that while the existing aviation security systems are basically sound, there are vulnerabilities in the system. These are the lack of flight-deck barriers in small regional aircraft, and lack of passenger screening at regional airports. These vulnerabilities were well known but have now been exploited and given more public exposure. The threat of this type of event re-occurring has not changed.
4. Increased security for aircraft between 19 and 89 seats would involve significant cost, and would have significant implications for airlines, airports, and regional passengers. The full extent of these implications has not yet been assessed.
5. I recommend that the committee agree to three immediate measures. These are:
  - a. Increased aviation security training requirements for airport and airline staff;
  - b. A feasibility study on adding flight-deck barriers to small aircraft;
  - c. A thorough review of domestic aviation security, reporting back to the committee by 21 May 2008. This will allow time for options involving security for smaller aircraft to be fully assessed.

### **Background**

6. On Friday 8 February a passenger on a J32 "Jetstream" aircraft operated by Eagle Air on an Air New Zealand flight from Blenheim to Christchurch attacked the pilots with a knife, sought to grapple with the controls and demanded to be flown to Australia. Both pilots sustained injuries but were able to land the aircraft safely in Christchurch.
7. The Police and Avsec responded to the incident in accordance with standard operating procedures and once the aircraft landed the Police took a 33 year old woman into custody. The woman claimed she had explosives on board the aircraft and it took additional time to clear the aircraft and confirm the claim was a hoax.

8. The woman faces one charge of hijack under the Aviation Crimes Act 1972, which carries a maximum penalty of life imprisonment, and a number of other charges relating to injuries suffered by the pilots.
9. At this point Police have no evidence indicating that there was any information available in advance of the incident to indicate the woman's intentions.
10. CAA is investigating the security aspects of the incident. Based on the information available to date, CAA is satisfied that the security measures presently in place were properly implemented. These measures were not, however, designed to prevent what appears to be a random act of aggression by a potentially irrational or disaffected individual acting alone.
11. CAA has already taken some action in response to the incident, including issuing a special Security Notice to industry stressing the need for high levels of security vigilance, and re-emphasising this need at a meeting with industry.

### **Current domestic aviation security controls**

12. The aviation security system comprises a range of measures designed to prevent acts of unlawful interference. These measures vary according to the type of operation and the assessed level of risk.
13. Avsec screens<sup>1</sup> all passengers and cabin baggage travelling on aircraft with more than 90 seats. The Government agreed to the 90 seat threshold in 2001.
14. The incident of 8 February highlighted two specific vulnerabilities in the system as it applies to smaller aircraft operated on regional services. These are:
  - a. As there is no passenger screening on aircraft of fewer than 90 seats, a passenger can illegally carry on board a prohibited item that could be used to endanger the safety of people or the aircraft.
  - b. As no flight-deck barriers are fitted on aircraft of the size involved in this incident, a person can gain immediate and unrestricted access to the flight-deck to unlawfully interfere with the pilots or aircraft.

### **Access to Flight Deck**

15. All airlines providing passenger services with aircraft of nine or more seats are required to have an Air Operator Security Programme. As part of this Security Programme, airlines are required to have procedures to prevent unauthorised people from entering the flight deck during flight.
16. Airlines operating larger jet aircraft comply with this requirement by having strengthened and locked cockpit doors. This is not prescribed under New Zealand legislation, but is required for international operations for aircraft with more than 60 seats.
17. The ATR 72 (66 passenger seats, turboprop<sup>2</sup>) and the Q300 (50 passenger seats, turboprop) aircraft are operated by Mt Cook and Air Nelson. These airlines comply by having non-strengthened flight deck doors that are closed during flight except when necessary. These doors could delay, but not necessarily prevent, access to the flight deck. Aircraft of 20 or more seats

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<sup>1</sup> Screening is defined as 'the application or other means, which are intended to detect weapons, explosives or other dangerous devices that may be used to commit an act of unlawful interference. Screening can be undertaken by x-ray, or by physical searches.

<sup>2</sup> A turboprop aircraft is powered by a jet-turbine engine driving a propeller.

are required to carry at least one flight attendant who could also play a role in restricting access to the flight deck.

18. Smaller turboprop aircraft with 19 passenger seats, including the Jetstream J32 (the type involved in the incident of 8 February), the Raytheon (Beech) 1900D, and the Dornier 228, are operated by Eagle Air, Vincent Aviation, Air National and Air West Coast. These airlines comply through procedural measures involving written warnings and direction to passengers from the flight crew. Aircraft of this size do not carry cabin crew.
19. There are a number of commercial aircraft operating in New Zealand that are smaller again than the 19 seat aircraft such as those affected by the 8 February incident. These aircraft can be as small as three passenger seats. The options presented in this paper do not cover aircraft of fewer than 19 seats because this threshold captures the vast majority of regular air passenger operations.

### **International comparisons**

20. New Zealand's current aviation security systems and practices are generally in compliance with the standards of the International Civil Aviation Organization, and are comparable with international best practice.
21. In Australia, 19 seat turboprop aircraft, of the type and size involved in the recent incident, in some cases fly within Australia unscreened. Aircraft up to Q400 size (approx 72 passenger seats) in some cases also currently operate unscreened.
22. In the United Kingdom, all services with 19 passenger seats and above are screened, reflecting their current terrorist threat level of 'severe' (New Zealand equivalent threat level is 'high').
23. In the United States, aircraft of the type and size involved in the recent incident, as well as those comparable with the remaining New Zealand domestic turbo-prop fleet operate unscreened in some cases within the domestic US regional passenger transport network.

### **Threat Level**

24. The current level of threat assessed by the Combined Threat Assessment Group (CTAG) for domestic aviation from terrorism and events involving disaffected or irrational individuals are:
  - a. threat of terrorist attack: Very Low (unlikely);
  - b. threat from disaffected or irrational individuals: Medium (feasible and could well occur).
25. The medium threat level assigned to an event involving from disaffected or irrational individuals does not reflect any specific intelligence indicating the possibility of an event occurring. Rather it acknowledges that such an event must be considered as feasible, albeit problematic to predict.
26. While there is a short term threat of 'copy cat' incidents, CTAG's view is that the current level of assessed threat from disaffected or irrational individuals remains appropriate at medium, and does not need to be changed. CTAG continues to hold the view that incidents involving irrational or disaffected persons are very hard to anticipate or predict.
27. CTAG considers it is not necessary to increase the threat level for terrorist attack as a result of this incident.

## **Implications of Changes for Regional Airports**

28. Any changes to security measures potentially have significant implications for regional airports.

### *Infrastructure*

29. The majority, if not all, regional airports that only service aircraft of fewer than 90 seats do not have infrastructure that allows aviation security screening to take place. This infrastructure requires, at a minimum, space where passengers who have be screened can be kept separate from passengers who have not been screened. It also requires facilities for Avsec staff.

30. Increased infrastructure may also be required at metropolitan airports for the screening of passengers travelling on aircraft of 19-89 seats. Currently these passengers are unscreened, so the infrastructure to screen them does not necessarily exist.

31. There may be further infrastructure and other costs that increased screening would impose on regional airports. These have not yet been identified or assessed.

### *Regional Access to Commercial Air Travel*

32. New Zealand's network of regional airports are critical to provide quick access to the regions. They provide links between the regions and larger centres, and on to international travel.

33. Many regional airports operate on slim margins. Increased costs to regional airports may reduce the viability of those airports, thereby reducing the network of regional airports.

34. Consideration needs to be given to the ability of regional residents to easily travel by air to the major centres and beyond. There are likely to be economic development implications of increased costs on regional airports. These implications have not yet been assessed.

## **Options**

35. Based on a preliminary review of domestic aviation security, officials have developed five options, which are outlined below.

36. The five options are:

- a. Retain the status quo;
- b. Strengthen training requirements for airline staff, and undertake a feasibility study on introducing flight-deck barriers to smaller aircraft;
- c. Hand screen most passengers and luggage on aircraft between 19 and 89 seats;
- d. Screen all passengers on aircraft of 19 or more seats, and introduce additional security measures at airports servicing such aircraft;
- e. Undertake a thorough review of domestic aviation security.

### ***Option One: Status quo***

37. The ability of passengers to illegally take prohibited items on aircraft is readily apparent to any passenger boarding an unscreened aircraft. Similarly, the ability to access the flight-deck on smaller regional aircraft is also apparent. These vulnerabilities in the system were exploited in

the hijack attempt of 8 February 2008. These vulnerabilities were also given significant media coverage as a result.

38. In the short term, this media coverage may increase the risk of copy-cat events. In the medium term, however, the risk may not have increased. It can be argued that although vulnerabilities were already well known and apparent, they had not previously been taken advantage of. The hijack attempt could be considered a random event by an irrational individual.
39. CAA considers that the media exposure of the event does potentially increase the risk due to copy-cat events.

#### *Assessment of Option One*

40. Retaining the status quo is the only option that does not have significant financial and infrastructure implications for airlines, airports, the Crown, or passengers. Retaining the status quo ensures that regional airports remain viable.
41. Retaining the status quo results in no public perception of over-reacting to the event. It may, however, be viewed negatively by people who consider that increased security should be implemented as a result of the event.
42. The status quo means that a similar hijacking event would be able to occur again.

#### ***Option Two: Feasibility study on flight-deck barriers, and improved training for airline staff***

43. This option has two parts:
  - a. Undertaking a feasibility study on whether barriers can be fitted to flight-decks of smaller aircraft; and introducing more robust procedures for aircraft already fitted with flight-deck barriers. If found feasible, barriers could be required on 19 passenger seat aircraft; and
  - b. strengthening the existing requirements for security training and awareness for airline and aerodrome staff.
44. In smaller turboprop aircraft without flight-deck doors, these doors are unlikely to be available from the manufacturer. If feasible, any modifications to the flight deck entrance, through fitting of doors or other barriers, may require new standards and equipment to be developed. The costs to the airlines may be significant if it involves development of suitable designs, testing, and certification. Further research into this issue is required to establish the costs and timeframes for implementation.
45. Work had previously begun on assessing the feasibility of flight-deck barriers as part of a rule-making project by CAA. This work can now be expedited.
46. If barriers to the flight-deck prove feasible, there are two mechanisms by which they could be required. One is the development of a Civil Aviation Rule by CAA. The other is the Minister of Transport passing a regulation under section 100(1)(ee)(ii)(A) of the Civil Aviation Act.

#### *Assessment of Option Two*

47. If found to be feasible, installing barriers to the flight-deck offers the minimum disruption to passengers and airports, while still addressing the apparent risk to aircraft that do not currently have flight deck doors.

48. Installing barriers to the flight-deck could require significant investment in aircraft modifications. This would have cost and performance implications, and is likely to be resisted by airlines.
49. A feasibility study will take some time to complete. Further research will have to be done into the costs and timeframes for implementation, including development of technology availability and design standards, testing and certification. In addition to engineering issues, consideration needs to be given to whether safety issues are raised by installing barriers.
50. Additional training for airline and airport staff can be undertaken quickly and simply, requiring no significant extra resources. This training will raise awareness, but would not provide surety that passengers cannot illegally carry prohibited items on aircraft.

**Option Three: Hand screen most passengers and luggage on aircraft between 19 and 89 seats**

51. Under this option, all passengers boarding aircraft without flight deck doors would be screened by Avsec officers using hand-held metal detectors and their cabin baggage would be searched by hand.
52. Most passengers boarding aircraft that currently have flight deck doors (20-89 passenger seats), would be screened in the same way. For these aircraft, Avsec officers will screen passengers on a random-continuous basis. As one passenger is being screened, others will move past without being screened. When the Avsec officer has finished with one passenger, they will select the next passenger in the queue for screening. The time it takes to screen different passengers will vary depending on the passenger and the speed of the Avsec officer. This ensures that it is not possible to predict who will be screened and who will not.
53. Screening in this way minimises the number of Avsec officers required to implement this option. It also reflects the increased difficulty of passengers accessing the flight deck due to flight deck doors and the presence of cabin crew.
54. This option could be implemented across the country within 14 days. A longer lead-in time would, however, be desirable to ease pressure on Avsec staff. It would also allow time for Avsec to conduct negotiations with the new airports regarding space for, and positioning of, screening points. Allowing a longer lead time would minimise problems related to inadequate screening facilities later on.
55. The costs of implementing this option are summarised in Table One below.

*Table One: Costs of implementing option three*

	2007/08	2008/09	2009/10	2010/11
	\$	\$	\$	\$
<b>Capital Expenditure</b>	<b>1,981,800</b>			
<b>Minor Asset Purchases - Operating Costs</b>	<b>953,560</b>	<b>65,000</b>	<b>65,000</b>	
<b>Recruitment &amp; Training</b>	<b>1,114,900</b>	<b>200,000</b>		
<b>Operating Costs</b>	<b>4,020,879</b>	<b>12,541,460</b>	<b>12,417,696</b>	<b>13,152,736</b>
<b>Total Costs</b>	<b>8,071,139</b>	<b>12,806,460</b>	<b>12,482,696</b>	<b>13,152,736</b>

Notes to Table One

- From commencement staff will be redeployed over a 3.5 month period while recruiting and training for the new positions is completed.
- For the purposes of this funding model a commencement date of 1 March 2008 has been assumed.

56. The operating costs of this option could be funded from the current domestic passenger security charge of \$4.66 (GST incl). The charge is paid by airlines on a per departing passenger basis.

Airlines recover the cost of the charge directly from passengers in the ticket price. Based on current passenger number projections, the existing charge, extended to the new passengers being screened, would recover all operating costs and set-up costs over a three year period.

57. The capital costs of this option would require a capital injection of \$1.982 million from the Crown. In the past, capital injections have been repaid, however, this may require an increase to the domestic passenger security charge.

#### *Assessment of Option Three*

58. This option will address the security risk of passengers bringing prohibited items onto most passenger aircraft flown in New Zealand and requires no major legislative change.
59. Should it be possible to fit doors or barriers to 19 seat aircraft, then passengers boarding those aircraft would be screened on the same basis as passengers boarding 20-89 seat aircraft, and the cost of the option may decrease. This has not been costed.
60. Avsec currently operates at eight New Zealand airports. This option will increase the number by 18 airports, to a total of 26. None of the 18 airports is a security designated airport under the Civil Aviation Act. (The Minister of Transport designates such airports.) Security designated airports have a higher level of security than non-designated airports. Security systems and processes at non-security designated airports are lower than at security designated airports. Avsec would not have the authority to conduct security patrols, form and chair airport security committees, or the power to arrest a person suspected of an aviation crime.
61. Five of the 18 airports that would be captured under this option are not certified by the Director of Civil Aviation under Civil Aviation Rule Part 139. Part 139 places obligations on airports to have a range of safety and security measures in place. These can involve costly and time-consuming infrastructure investment, such as 2.44 metre security fences and Runway End Safety Areas. Officials have not been able to estimate these costs for the five non-certified airports, however, they may be significant and could threaten the financial viability of those airports. Further work is required to accurately estimate these costs. Avsec is reluctant to operate at airports that do not have Civil Aviation Rule Part 139 certification because its ability to carry out its full range of functions is limited, and security measures such as security awareness programmes for airport staff and procedures for dealing with security breaches would not be in place.
62. The screening proposed in this option can be carried out without a security designation and Civil Aviation Rule (CAR) Part 139 certification.
63. CAA has not yet fully assessed whether security designation and Part 139 certification will address vulnerabilities highlighted by the 8 February incident. When such an assessment is completed, it will take into account the costs to smaller airports, and the fact that Avsec can legally carry out screening without security designation or Part 139 certification.
64. There will be costs to airports of providing Avsec with appropriate space to undertake screening activities. Airports are able to charge Avsec rent for the space they require, however, there are many small airports in New Zealand that would struggle to find suitable space in their existing terminals. There would also be costs to airports if they became security designated or certified under Part 139. It has not been possible to assess these costs, or the impact of these costs on the financial viability of regional airports. The implications of potential airport closures for regional development and access by smaller communities to air transport needs to be investigated.
65. This option will have implications for the Police who have the primary responsibility for public safety in New Zealand, and shared responsibility with Avsec for aviation security. Police have

advised that they will manage their response times to requests for service from the additional screening points at regional airports in accordance with Police's current prioritisation and response time model.

66. Screening passengers using hand-held metal detectors, and searching their cabin baggage by hand is a slow method of screening. It is likely to cause flight delays. This may mean that passengers travelling on 19-89 seat aircraft need to check-in for their flights earlier than at present, to allow screening to take place. Delays could be reduced by airlines more rigorously enforcing their policies limiting hand luggage to one piece of a specified size and weight. Airlines cannot, however, be compelled to enforce their policies and are unlikely to be consistent in their approach.
67. Option three requires a considerable investment in Avsec equipment and staff, and this cost will be passed onto airlines (and then to passengers) through the current domestic security charge of \$4.66 per passenger.
68. Officials consider it likely that airlines, airports and passengers will respond negatively to increases in cost and check-in times.
69. While option three could be implemented in a reasonably short timeframe if necessary, I consider that more work is needed on the costs and benefits of this option. There particularly needs to be work on the issues of security designation and Part 139 certification, and on the impact on regional airports.

**Option Four: Screen all passengers on aircraft of 19 or more seats and introduce additional domestic security measures at airports servicing such aircraft**

70. This option involves screening all passengers boarding aircraft of 19 seats or more using the same measures currently in place for aircraft of 90 seats or more (ie walk-through metal detectors and cabin baggage x-ray machines).
71. This option will also increase the number of airports served by Avsec by 18 to 26 airports, and would also include the following security measures applied by Avsec:
- Access control – through foot, mobile, and perimeter patrols; and
  - Airport Identity Card regime – conducting background checks and issuing airport identity cards to airport workers.
72. The costs of this option are set out in Table 2 below.

*Table Two: Costs of Option four*

	2007/08	2008/09	2009/10	2010/11
	\$	\$	\$	\$
<b>Capital Expenditure</b>	<b>3,185,350</b>			
<b>Minor Asset Purchases - Operating Costs</b>	<b>743,280</b>	<b>65,000</b>	<b>65,000</b>	
<b>Recruitment &amp; Training</b>	<b>919,950</b>	<b>919,950</b>		
<b>Operating Costs</b>	<b>2,680,586</b>	<b>16,138,013</b>	<b>16,893,354</b>	<b>17,908,191</b>
<b>Total Costs</b>	<b>7,529,166</b>	<b>17,122,963</b>	<b>16,958,354</b>	<b>17,908,191</b>

Notes for Table Two

- This model is set to commence full screening within 6 months. For the purposes of the funding model a start date has been assumed as 1 September 2008.
- This allows for recruiting for the first 3 months and then a graduated employment and training over the following three months with total deployment and full domestic screening of 15 seat aircraft and over by 1 September 2008.
- If full staffing levels have not been achieved by 1 September 2008 any redeployment requirements will be met through the salary costs already allowed for.

73. The current domestic passenger security charge of \$4.66 (GST incl) would recover the ongoing operating costs but would not quite recover all the initial set-up costs (over a three year period). A capital injection of \$3.185 million would be required from the Crown. An increase in the charge would be required if this injection was to be refunded to the Crown.

74. It would take six months for Avsec to fully implement this option.

#### *Assessment of Option Four*

75. Option four would address the majority of the security risk that currently exists on aircraft of fewer than 90 seats. It would ensure that there is uniform security across all commercial aircraft of 19 or more seats flying domestically within New Zealand.

76. Many of the implications of option three (set out in paragraphs 58 – 69 above) apply to option four. In particular, the issues around security designation, Part 139 certification and cost implications for regional airports are the same for both options.

77. The type of screening proposed under option four is no more intrusive or time consuming than the screening that already occurs for aircraft of 90 seats or more. It is therefore unlikely to cause the delays likely under option three. Passengers will also be familiar with this type of screening, so it is likely to encounter less resistance.

78. Option four requires a considerable investment in Avsec equipment and staff, and this cost will be passed onto airlines (and then to passengers) through the current domestic security charge of \$4.66 per passenger. The charge would have to be increased if the Crown sought to have the capital injection repaid.

79. I consider that more work is needed on the costs and benefits of this option, particularly on the issues of security designation and part 139 certification, and the impact on regional airports.

#### ***Option Five: Undertake a review of domestic aviation security***

80. This option involves officials conducting a review of domestic aviation security in New Zealand.

81. The review will assess the costs and benefits of:

- a. Avsec providing limited and full screening at a further 18 regional airports where they are not currently present (that is, options three and four);
- b. airport infrastructure development for implementing or increasing screening;
- c. implementing flight deck doors or barriers on aircraft that currently do not have these, including the costs of technology development, testing and certification;
- d. ideas put forward by industry on ways to improve security; and
- e. the legal or regulatory implications of all the options.

82. The review will include consultation with key stakeholders, including the Ministry of Transport, CAA, Avsec, the Police, airports, and airlines. It will also include consultation with the Treasury, the Ministry of Economic Development, the Ministry of Tourism.

83. It is estimated that this review will take three months to complete.

### *Assessment of Option 5*

84. Option five allows time for a thorough and well considered review to be undertaken. It will allow an assessment of the implications for regional airports, regional airlines, and access and economic development implications for the regions generally.
85. This option also allows time for the industry to work through the feasibility of its ideas and for consultation to take place. At the meeting held with industry representatives on 14 February, a measured and considered development of proposals was strongly endorsed by the representatives present.
86. It may appear that the government and industry are not taking the incident of 8 February seriously and moving immediately to make the aviation system more secure.

### **Consultation**

87. CAA and Avsec have been consulted on this paper. This paper is based on a report developed by CAA, New Zealand Police, Avsec, and the Ministry of Transport.
88. The aviation industry was presented with broad outlines of the options at a meeting on 14 February 2008. Generally, the industry recognises that something needs to be done but were concerned about the potential cost. The industry presented some ideas for improving aviation security which require more investigation.

### **Financial implications**

89. There are no financial implications associated with the recommendations set out in this paper. There are costs associated with screening aircraft of fewer than 90 seats. These will be the subject of a future paper.

### **Legislative implications**

90. There may be legislative or regulatory implications related to options requiring additional screening. These have not yet been assessed. There are no immediate legislative or regulatory implications of retaining the status quo, or of undertaking a thorough review of aviation security.

### **Regulatory impact assessment**

91. There are likely to be considerable business compliance costs and regulatory impacts from any of the options that require additional screening. These costs and impacts have not yet been assessed.
92. There would be no compliance costs or regulatory impacts from retaining the status quo.
93. If Cabinet agreed to a review of regional aviation security, business compliance costs and regulatory impact would be considered as part of that review.

### **Gender, disability and human rights implications**

94. There are no gender, disability or human rights implications arising from this paper.

### **Publicity**

95. The Minister of Transport will announce the outcome of the preliminary review following Cabinet consideration of this paper.

## Recommendations

96. I recommend that the Committee:

1. **note** that the attempted hijacking of a 19 seat aircraft on 8 February 2008 has highlighted vulnerabilities in New Zealand's aviation security system, in particular the lack of flight-deck barrier on aircraft of fewer than 20 seats, and the lack of screening of passengers on aircraft of fewer than 90 seats;
2. **agree** to improved security training requirements for airline and airport staff at regional airports;
3. **agree** to a feasibility study on flight-deck barriers on smaller aircraft;
4. **agree** to a review of domestic aviation security focussed on smaller passenger aircraft;
5. **invite** the Minister of Transport to report back to the Cabinet Policy Committee on the feasibility study on flight-deck barriers, and the review of domestic aviation security by 21 May 2008.

Hon Annette King  
**Minister of Transport**

Dated: \_\_\_\_\_

