

Emergency Services Commissioner

A report of the response to an emergency at Melbourne Airport on 21 February 2005

24 March 2005



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Executive Summary

- 1. On 21 February 2005, State and Commonwealth emergency services were involved in a multi agency response to an incident at Melbourne Airport resulting in the evacuation and closure of the southern terminal housing Virgin Blue Airlines. The incident began at around 7.10am as a medical response to a collapsed female by the Aviation Rescue and Fire Fighting (ARFF) service and concluded shortly after 6.00 pm with the reopening of the southern terminal.
- 2. By the end of the day 57 people had been seen by ambulance officers, 47 of whom were transported to hospital. All, but one person with an underlying medical condition were released the same day. It has been reported that symptoms persisted in some people for a number of days.
- 3. Airport air handling systems expelled air from the affected area during the incident enabling the international terminal and Qantas domestic terminal to continue operations. This action may also have expelled any agent that may have been present along with the air from the terminal.
- 4. The Metropolitan Fire Brigade (MFB) used specialised air testing equipment in an attempt to locate the source of the incident, but was unable to identify a responsible agent or determine the cause, due in part to the time taken for it to become involved and in part to the air conditioning being switched to outside spill mode which exhausted air from the southern terminal.
- 5. Department of Human Services (DHS) epidemiological studies have been unable to determine a cause of the illness. DHS has discounted water or food borne transmission or other biological agent. DHS believes that the cause is unlikely to be determined.
- 6. The incident highlights that, under existing protocols, an event involving as few as two or three people can shut down critical national transport infrastructure. This could occur again during a response to a medical incident under similar conditions. The conditions in this case involved an enclosed space, people displaying similar symptoms within a short period of time. ARFF routinely responds to medical events at the airport.
- 7. The review identified coordination shortcomings involving a range of agency processes during the incident. While these did not materially affect the outcome in terms of public safety, they contributed to the public perception that the incident was not well managed.



- 8. Formal and informal notification processes during the early stages of the incident did not work as expected, delaying the attendance of personnel whose collective expertise would have contributed to crucial early decision making.
- 9. The incident highlighted the need for multi agency notification at the earliest possible time. This is to ensure delivery of a comprehensive emergency response to an incident with the correct mix of specialist resources. It also highlighted the need for regular engagement of all relevant stakeholders from State and Commonwealth agencies and airlines in planning, scenario testing and exercising in preparation for such incidents.
- 10. Coordination of the media and communication of information to the general and travelling public was poorly managed. This improved when Victoria Police media liaison personnel arrived and coordinated media communications in accordance with Victoria's Emergency Management Arrangements.
- 11. There are opportunities to improve understanding by the State's emergency services and Virgin Blue Airlines about their respective priorities and timelines the need to respond effectively to the emergency and to maintain or restore national airline operations. Inadequate information flow affected planning decisions that resulted in national disruption to domestic air transport for two days.
- 12. The review confirmed that Victoria's Emergency Management Arrangements involving State and Commonwealth agencies provide the appropriate framework for managing an incident such as this. Shortcomings that were identified arose from insufficient detail concerning the application of the arrangements in documented plans and procedures, or divergence from agreed processes, rather than flawed arrangements. In many instances the shortcomings resulted from a lack of knowledge concerning the arrangements or the capability of the other agencies involved.
- 13. Separate strategic and operational emergency services debriefs and interviews with State and Commonwealth agencies confirmed the existence of an appropriate level of cooperation between the jurisdictions and agencies during the incident.
- 14. The final report from the review contains recommendations to improve planning, coordination and management of future incidents. The recommendations are designed to address protection of public safety, the current security environment, and the restoration of normal airport operations.



Recommendations

- i. Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan to confirm that planning and response arrangements appropriately consider the protection of public safety, the current security environment and the timely restoration of airport operations, and that it is consistent with state emergency response planning arrangements.
- ii. Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan to ensure the capabilities of agencies are adequately documented and understood by all stakeholders, and that all agencies including airlines are represented at the appropriate organisational level on the Airport Emergency Planning Committee.
- iii. Metropolitan Fire Brigade and Aviation Rescue Fire Fighting service review and enhance the existing mutual response Memorandum of Agreement to provide more timely notification and therefore immediate access to appropriate resources to respond to emergencies.
- iv. All agencies review formal and informal incident notification processes to ensure they support the earliest possible reporting of emergencies to all stakeholders involved in the Airport Emergency Plan and in so doing, ensure early access to specialist advice and support.
- v. Melbourne Airport management, the emergency services and airlines develop risk based tactical plans that, where safe and appropriate, allow the staged or progressive closure or re-opening of terminal space to support continuity of airport operations during emergencies.
- vi. Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan, to consider the use of alternative locations for staging, evacuation, assembly and incident coordination, to increase separation of emergency operations from non emergency activity be adopted.
- vii. Victoria Police, Melbourne Airport management, airlines and emergency services develop a Memorandum of Understanding for media coordination and public communications at Melbourne Airport that documents the responsibility for media coordination during emergencies to Victoria Police.
- viii. Reference to the Aviation Rescue and Fire Fighting service in Part 6 of the Emergency Management Manual Victoria, table of control and support agencies, be extended to include its responsibility for hazardous materials emergencies at the airport.
 - *ix.* The Office of the Emergency Services Commissioner convene a working group of key emergency services and emergency management agencies to develop a flow chart based on scenario testing, to support decision making and the assessment of response requirements to medical, hazardous materials and CBR emergencies including their transition from one type to another.



The Role of the Emergency Services Commissioner

- 15. Under S.21C of the *Emergency Management Act* 1986, the Commissioner is required:
 - a) to establish and monitor standards for the prevention and management of emergencies, which are to be adopted by all emergency services agencies
 - b) to advise, make recommendations and report to the Minister on any issue in relation to emergency management
 - c) to encourage and facilitate co-operation between all agencies to achieve the most effective utilisation of all services
 - d) to act as the Executive Officer of the Victoria Emergency Management Council
 - e) any other function conferred on the Commissioner by or under this or any other Act

Terms of Reference

- 16. The Premier of Victoria, the Hon. Steve Bracks, MP requested the Emergency Services Commissioner, Mr Bruce Esplin, review the response to an incident at which a number of people became ill and that resulted in the closure of the southern domestic terminal of Melbourne Airport on 21 February 2005. The Commissioner was requested to oversight the debriefing process and prepare a report to him.
- 17. The terms of reference established for the review are to:
 - oversight the operational and strategic debriefs of the incident
 - analyse Victoria's response to Melbourne Airport
 - identify potential improvements to future emergency response activity
 - identify opportunities to strengthen Victoria's Emergency Management Arrangements
 - evaluate the adequacy of arrangements between Victorian and Commonwealth agencies involved in the incident
 - investigate and analyse any matters pertinent to a comprehensive understanding of the incident
 - make appropriate recommendations to improve the management and response to emergency incidents
- 18. The review focussed, in particular, on whether arrangements for the management of emergencies at Melbourne Airport were appropriate:
 - with regard to public safety
 - in the context of current international security concerns and risk
 - to facilitate the timely restoration of normal airport operations

The review was also concerned to identify the cause of the incident.



- 19. The review was jointly coordinated by Mr Dale Sullivan, Director Emergency Services Performance, Office of the Emergency Services Commissioner and Superintendent Murray Adams, State Emergency Response Officer, Victoria Police. Mr Mark Stephens, Manager Standards & Review, Office of the Emergency Services Commissioner and Mr Simon Gooey, Senior Policy Officer, Office of the Emergency Services Commissioner assisted with the review.
- 20. The review drew on information from emergency service debriefs and interviews with key State and Commonwealth agencies, airline and emergency services personnel involved in the incident. This included documentation drawn from legislation, regulations, emergency management plans and agreements, incident reports, records and chronologies.

Background

- 21. At 10.00am on Monday, 21 February 2005, evacuation of the southern domestic terminal of Melbourne Airport commenced. The terminal remained closed for approximately eight hours. This was a consequence of several people who were employed at the airport becoming ill inside the terminal. The incident drew significant media and public attention. Emergency services ordered the closure of the terminal following the presentation of up to six airport workers in an hour who presented as unwell or displayed one or more symptoms of nausea, faintness, headache, throat irritation, breathlessness or vomiting.
- 22. The report contains recommendations to improve planning, coordination and management of such incidents. The recommendations are designed to address protection of public safety, the current security environment, and the restoration of normal airport operations.
- 23. Closure of the southern domestic terminal and its exponential effect disrupted approximately 40% of domestic passenger aircraft services across Australia for two days following the incident.

Melbourne Airport

- 24. Melbourne Airport opened on 1 July 1970. The airport is located approximately 22 kilometres from the heart of Melbourne on a 2,369 hectare site. The airport terminal comprises a three storey central international terminal with two interconnecting two storey domestic concourses. Significantly, the airport is not subject to an aircraft operations curfew that limits night operations at some other airports nationally. The airport features 14 international aircraft stands, 46 domestic aircraft stands and three freight stands.
- 25. The airport services over 450 international flights and over 2,600 domestic flights per week with passenger levels in excess of 19 million per annum. It supports directly the employment of over 10,000 people across a variety of sectors. It is a critical component of the State's transport infrastructure, along with the Port of Melbourne and the State's major arterial roads.
- 26. Australia Pacific Airports (Melbourne) Pty Ltd (APAM) acquired a 50 year lease with a 49 year option in July 1997 over Melbourne Airport from the Commonwealth Government.



- 27. The airport lease provides that the lessee, APAM, is subject to the same responsibilities for people or property, as if it were the freehold owner. The lessee is responsible for establishing appropriate arrangements with relevant national and state agencies to ensure the efficient and safe operation of the airport. The regulatory framework for leased Commonwealth airports is contained in the Commonwealth *Airports Act 1996* and its regulations. The Commonwealth Government also oversights security at the airport through the Department of Transport and Regional Services' Office of Transport Security. The Commonwealth has no direct role in the operation or management of Melbourne Airport.
- 28. The Department of Transport and Regional Services can terminate an airport lease if it loses its aerodrome certificate. The Civil Aviation Safety Authority is the aerodrome certifying authority. Certification of an aerodrome is dependent on the aerodrome meeting the requirements of the *Civil Aviation Safety Regulations 1998* (CASR). Failure to meet CASR requirements provides grounds for revocation or non-renewal of the aerodrome certificate, which would lead to termination of the lease.
- 29. Civil Aviation Safety Regulations require the maintenance of an airport emergency management plan, an emergency management committee which includes relevant response agencies likely to attend an incident, and testing of the emergency plan through an exercise every two years. Melbourne Airport complies with all these requirements and conducts a major multi agency exercise every year, exceeding the minimum two year period required by CASA.
- 30. Sinclair Knight Merz conducted an economic impact study for the Melbourne Airport which was publicly released in March 2003. The study described the impact of an efficient Melbourne Airport on National and State economies between 1997-1998 and 2001-2002. This is reflected in its contribution to real Gross Domestic Product (GDP) and real Gross State Product (GSP) in the table below.

	1997-98	1998-99	1999-00	2000-01	2001-02
Real GDP (\$m)	57.1	120.8	183.6	239.3	298.3
Real GSP (\$m)	99.4	212.3	331.1	431.1	536.2

Airport Rescue and Fire Fighting Services

- 31. As a signatory to the Chicago Convention, Australia is obliged to require, as part of its domestic law, that certain classes of airport provide rescue and fire fighting services of an adequate standard. Melbourne Airport is classed as an airport that requires an on site rescue and fire fighting service.
- 32. Part 14 of the Commonwealth *Airports Act 1996* specifies that fire fighting and rescue services will be provided by Airservices Australia at airports leased from the Commonwealth. Airservices Australia is a Commonwealth statutory



authority. The Aviation Rescue and Fire Fighting (ARFF) service is a business unit of Airservices Australia. It provides a medical first responder role anywhere at Melbourne Airport, structural fire fighting to any airport facility and a hazardous materials response capability in addition to its aircraft emergency role. It is also the nominated control agency in the Melbourne Airport Emergency Plan, for chemical substance emergencies.

- 33. ARFF operates under the *Civil Aviation Safety Regulations 1998* which document requirements for the operation of aerodrome rescue and fire fighting services. They describe the requirement to meet certain standards including levels of Australian Fire Competencies as determined by the Australasian Fire Authorities Council. The regulations also specify the powers of the ARFF Officer in Charge and firefighters, including the power to order a person to leave airport premises, an aircraft or other property.
- 34 ARFF resources at Melbourne Airport consist of a main fire station and a satellite fire station, crews from either or both being able to respond to an incident in the terminal buildings whilst still maintaining an aircraft emergency response capability. Normal shift staffing at the main station comprises a Fire Commander, a Station Officer and eight firefighters. The satellite station is staffed by a Station Officer and two firefighters. A Senior Fire Commander is in overall charge of the service at the airport.
- 35. ARFF provides a medical first response at the airport to over 350 medical calls per year and all 67 staff are qualified at Senior First Aid level, CPR and specialised first aid equipment modules. Staff skill levels are field assessed every 90 days.
- 36. In August 1999, Airservices Australia/Aviation Rescue and Fire Fighting services and the Metropolitan Fire Brigade (MFB) entered into a Memorandum of Agreement which provides for either organisation to request the assistance of the other. In instances where MFB attends the airport, the agreement allows the Senior MFB Officer to take charge.
- 37. The agreement supports the close relationships that exist between ARFF and MFB at the executive, zone and local station level.

Victoria's Emergency Management Arrangements

- 38. Victoria and its emergency services have a long history of, and experience in dealing with, a range of emergencies. Some of these, such as bushfire, have been highly destructive. Victoria's capability to plan for, respond to and recover from emergencies is documented in the Emergency Management Manual Victoria. It includes Victoria's emergency response and recovery plans. The manual describes the coordination arrangements agreed by Victoria's emergency services and emergencies involving both State and Commonwealth agencies, including operations across jurisdictions and arrangements for requesting resources.
- 39. Emergency management involves the plans, structures and arrangements which are established to bring together the normal endeavours of government, as well as voluntary and private agencies in a comprehensive and coordinated way to



deal with the whole spectrum of emergency needs, including planning, prevention, response and recovery.

- 40. Major emergencies occur infrequently and, initially, may be difficult to differentiate from lesser order events. Victoria's Emergency Management Arrangements provide for scalability, so that plans do not rely on particular triggers for their activation. The arrangements are intended to apply equally to small and large scale emergencies. They provide for the graduated marshalling and utilisation of resources to manage an emergency, using commonly understood agency systems and structures in a broad set of coordinating arrangements that operate at municipal, divisional and state levels.
- 41. Response management arrangements bring together in an integrated organisational network, the resources of the many agencies and individuals to facilitate appropriate and timely action. Response management is based on principles of command, control and coordination. Victoria's arrangements assign control of an incident to one agency depending on the nature of the emergency. Control resides, for example, with DHS in the case of a biological emergency, and the fire brigade in the case of fire or hazardous materials emergency. The roles and responsibilities of agencies are described in the Emergency Management Manual Victoria, together with the type of emergencies to which control responsibilities are assigned. It is to be noted that the Melbourne Airport Emergency Plan incorrectly nominates MAS as a 'control agency' for medical emergencies, rather than as a support agency. This should be corrected in the Airport Emergency Plan.

Overview of incident

42. At approximately 7.12am on Monday 21 February 2005, the Airport Coordination Centre was notified that a female newsagency employee had collapsed at the bottom of the escalators on the mezzanine level of the southern domestic terminal. In accordance with airport procedures, a medical response team from the Aviation Rescue and Fire Fighting (ARFF) service was dispatched. The female was subsequently transported by the Metropolitan Ambulance Service (MAS) to the Northern Hospital. The incident was not considered unusual by attending services and was considered unrelated then and later to the incident that developed.





First newsagency employee collapsed near the bottom of escalators 7.12am.

43. At approximately 8.48am, the Airport Coordination Centre was notified about a second female newsagent employee who had collapsed inside the news agency. ARFF was dispatched and found the woman conscious and breathing.



The newsagent where the second employee collapsed at 8.48am

44. At about 9.02am, the Airport Duty Manager, who was outside the newsagency with the Airport General Manager Operations and Terminal Operations Manager, advised ARFF staff that an American Express stand employee had collapsed. This occurred approximately 15 metres away from where the woman in the newsagency was being treated. An ARFF staff member attended to this woman who was also vomiting.





An American Express employee collapsed near the American Express stand at 9.02 am

Two Virgin Blue Airlines employees from the counter above this area reported ill at 9.55am

- 45. Airport management cordoned off the immediate area on the mezzanine level and commenced air testing for breathability, receiving normal readings. The air conditioning for this area was in full fresh air mode. MAS was notified and arrived at approximately 9.15am.
- 46. ARFF and MAS discussed whether the 7.10am and 8.50am incidents were related. ARFF advised that it had been unable to find any evidence to indicate a relationship. MAS subsequently relocated outside the terminal to undertake patient triage as part of their planned protocol for this type of incident. At the same time ARFF and MAS staff discussed evacuating the terminal.
- 47. At approximately 9.30am, MAS reported they had six patients, and additional ambulances were dispatched. The Operations Manager, Emergency Planning MAS, advised by radio that MAS crews were not to enter the building until he and the Area Group Manager arrived.
- 48. At this time the MFB, Fire Service Communications Controller (FSCC) at the Tally Ho emergency services communications centre was contacted by the media enquiring about "an incident at Tullamarine Airport". The FSCC was unaware of this incident. He contacted relevant MFB Commanders seeking information, but received no information that indicated a need for MFB involvement at that time.
- 49. The ARFF Senior Fire Commander responded to the incident and while en-route advised Air Traffic Control of the situation and that the closure of the terminal may be required. He arrived at the scene at approximately 9.34am and was briefed by his staff. This situation report included information about the lack of any obvious physical evidence, vapour or odour, and the advice from MAS regarding evacuation of the terminal.



- 50. The ARFF Senior Commander believed that conflicting information existed over the exact impact on people and the time frames of the reports of casualties. He instructed one of his staff to go to the triage area to determine precise casualty numbers. This ARFF staff member identified the two original patients (from the newsagent and the American Express employee) and a Group 4 Security Officer. The security officer indicated that following union advice, all security staff would be presenting to be checked by MAS.
- 51. Melbourne Airport staff and ARFF continued air testing using portable detection equipment and searching for possible causes. This did not produce any abnormal results. The ARFF Commander requested that the air handling system in the southern terminal be set to exhaust as a precautionary measure.
- At about 9.45am, the ARFF Commander and the MAS Commander conferred 52. about the exact numbers of casualties. The ARFF Commander determined that two of the security staff had reported from the departure screening point some 600 metres from the original scene. The MAS Commander recommended evacuating the terminal. The recommendation was made on the basis of multiple casualties over a short period of time, that it occurred in an enclosed area and that there were common symptoms. The ARFF Commander discussed his concerns relating to possible food poisoning, industrial issues with the security staff and the potential impact on other people in the terminal witnessing the situation. The MAS Commander advised that the patients were symptomatic of exposure to a substance. The ARFF Commander requested that DHS be contacted to confirm the MAS assessment. At approximately 9.50am, MAS contacted Medical Displan, who concurred with the MAS assessment and advised that an Area Medical Officer was not warranted. MAS reaffirmed their advice to the ARFF Commander.



Virgin Blue Airline concourse and Group 4 security screening area



- 53. At approximately 9.55am, two Virgin Blue staff presented at the triage area. The ARFF Commander decided to close and evacuate the terminal. This effectively stopped all aircraft traffic from docking at the southern terminal aircraft stands. It also stopped all motor vehicle traffic approaching the Virgin Blue terminal. Passengers from 14 Virgin Blue aircraft and 5 Regional Express flights were disembarked on the tarmac through to 4.20pm that afternoon. They were bussed to a nearby freight facility for baggage collection.
- 54. Using public address announcements, Melbourne Airport, Virgin Blue and the Australian Federal Police (AFP) staff evacuated the people in the southern terminal to an open air evacuation assembly area outside the Hilton Hotel. The evacuation was conducted in an orderly and safe manner with no reports of injury or public concern.
- 55. The Melbourne Airport Emergency Plan was put into effect. Safety and security activities around the terminal were implemented, including handling arrangements for passengers in aircraft that had already landed.
- 56. The international terminal was cordoned off from the southern terminal using tape barriers. Staff were positioned to keep the public out of the southern terminal. MAS staff were advised over the MAS radio network to wear appropriate protective clothing and masks.
- 57. Victoria Police was notified at 10.09am by the Airport Coordination Centre via the Telstra 000 emergency number. Police responded to support the incident management and evacuation process. At about this time MAS gave the first of a number of media interviews. Many of these had not been cleared through either the Incident Controller or the MAS Commander. This was contrary to established emergency management arrangements
- 58. The first police units arrived at approximately 10.15am. At around 10.24am, Victoria Police provided MFB with details of the incident via a telephone call between communications centres.
- 59. An emergency management team was established consisting of ARFF (incident control), Victoria Police, MAS, Melbourne Airport and Virgin Blue. The team agreed that incident control would remain with ARFF in accord with both the State and airport plans. With the terminal secured, attention focused on the welfare of evacuees and aircraft on the tarmac.
- 60. At around 10.40am, MAS and DHS Public Health representatives discussed the situation by telephone. Shortly before 11.00am the Salvation Army arrived. It supplied refreshments to evacuees in accordance with the arrangements in the Airport Emergency Plan. As the situation was still unclear, DHS decided to attend at the incident. Two DHS Public Health staff arrived at approximately 11.20am.
- 61. Victoria Police Media Liaison had been on standby from 10.34am. At about 10.50am the Police Commander requested media liaison attend the airport to coordinate information to the media. The first planned media conference was held at 12.00noon.



- 62. The Incident Controller and DHS staff met to consider the situation. It was determined that the event was more likely a hazardous materials incident than a biological issue and control should remain with ARFF. DHS requested advice concerning the type and level of detection equipment being used. Following confirmation that testing was for air quality and flammability, not for toxic chemicals, DHS suggested that MFB be notified and asked to undertake analysis using more sophisticated and comprehensive testing equipment.
- 63. Reports of possible mist and acidic spray from the air conditioning units in the international terminal customs area were received at 11.25am. These were subsequently discounted as being related to the earlier changes to the air handling system southern terminal and the subsequent effects on the other systems. No one with symptoms presented from the international area, although consideration at the time was given to closing the international terminal.
- 64. At 11.54am MFB was notified via the Telstra triple zero emergency number to attend at the airport. DHS also contacted senior MFB officers, who arranged for the attendance of scientific staff and air testing equipment. By this stage MAS had transported 32 people to the Northern Hospital. Seven others had refused to be transported. The Northern Hospital reported that some of the patients were suffering abdominal pain and some were vomiting.
- 65. The first MFB appliances arrived at 12.03pm and waited for appropriate scientific, testing and safety equipment to arrive.
- 66. MFB scientific staff arrived at 12.25pm and were briefed by the ARFF Incident Controller. The Acting Assistant Chief Fire Officer, MFB Western Zone arrived at approximately 12.45pm. During a 1.00pm briefing to all agencies, incident control was transferred to MFB in accordance with the Memorandum of Agreement between ARFF and MFB. MAS advised that, to that time, it had transported 38 people to hospital. A number of these were believed to have been affected by sun exposure. The temperature at the time was approximately 25 degrees. The Broadmeadows Town Hall was established as an emergency relief centre with the Red Cross in attendance to support evacuees, in accordance with the municipal emergency plan.
- 67. From 1.00pm through to 6.00pm, hourly briefings with agencies were held by the MFB Incident Controller. At each of the earlier briefings, MFB advised the participants, including Melbourne Airport and Virgin Blue that the testing would take some time, but could not indicate how long it might take to resolve the incident. No minimum or maximum time was given. Further advice was expected to be available at the next hourly briefing. Throughout the day, Victoria Police and Virgin Blue provided evacuees with available advice and information regarding progress to resolve the incident.
- 68. By 1.30pm, MFB had developed an incident action plan for comprehensive air testing of the southern terminal. A team of MFB and ARFF personnel in fully encapsulated suits commenced testing in the southern terminal. Progressively, the level of personnel protective clothing being worn was reduced as testing did not reveal abnormal readings.



- 69. By 2.00pm, MAS advised that 10 more Virgin Blue staff believed to be heat affected were at the triage area. A total of 47 people had been transported to the Northern Hospital and 10 people had refused transportation. A number of the initial casualties were now returning from the hospital by taxi. By 3.00pm MAS advised that no further casualties were presenting to the triage area and it was scaling down its activities.
- 70. Testing in the southern terminal occurred over a four hour period. It included external air exhaust units and discrete testing within the international terminal. Initial testing focussed on the area where the first casualties presented around the mezzanine level news agency. It subsequently spread across larger areas of the terminal. Testing was undertaken using Photo Ionising Detectors (PIDs) to search for high concentrations of foreign material in the atmosphere. Rapid Alarm Identification Detectors (RAIDs) were used to test the atmosphere for traces of other agents. In best case conditions the teams had approximately 30 minutes in which to test before having to leave the building to replenish air supplies. At this point a fresh team would replace them.
- 71. No readings were indicated for suspect agents and only extremely minor readings registered for foreign materials. These were expected and related to aircraft exhaust fumes and the contents of two bins containing seized aerosol cans. The highest reading obtained was 0.0052% of the atmosphere (or 52 parts per million). This was found in bins containing the seized aerosol cans after the lids were lifted. All readings were provided to the MFB Scientific Officer for confirmation and interpretation.
- 72. No substances in the atmosphere of the southern terminal were discovered. The MFB Incident Controller decided to return the air handling system to its normal cycle. This was to allow it time to stabilise before performing a final test of the main mezzanine area. This test produced normal results. A briefing was held with all agencies and a reoccupation strategy for the terminal was prepared. At approximately 6.20pm the scene was formally handed back to Melbourne Airport management and the incident was officially closed.

Issues and Analysis

The Emergency Response to the Incident

- 73. The review confirmed that the emergency response to the incident under the Airport Emergency Plan was generally in accordance with Victoria's emergency management plans and arrangements as they are described in the Emergency Management Manual Victoria. Operational debriefs and agency interviews confirmed that multi agency operations worked reasonably well and that the transfer of control during the incident from ARFF to MFB occurred seamlessly.
- 74. MFB and ARFF have a clear understanding of their respective responsibilities regarding hazardous materials events at the airport. Their respective responsibilities were not generally well known by some of the other agencies involved in the incident.



Recommendation: Reference to the Aviation Rescue and Fire Fighting service in Part 6 of the Emergency Management Manual Victoria, table of control and support agencies, be extended to include its responsibility for hazardous materials emergencies at the airport.

- 75. MAS was notified at the earliest possible time during the incident, when ARFF assessed it to be an incident requiring a medical response. The subsequent management of the event as a hazardous material incident by ARFF, MAS and MFB was confirmed as appropriate. The decision to evacuate the southern terminal was also reinforced as the appropriate decision in the circumstances.
- 76. Notwithstanding the appropriateness of these decisions, the review identified a number of response issues that may have had a direct bearing on the timely resolution of the incident and its impact on the continuity of airport operations. While it is arguable whether the outcome would have been different, it may have been possible to resolve the incident through coordinated multi agency activity earlier than occurred.
- 77. Incident notification processes appeared responsible for a delay of more than three hours in initiating specialised and comprehensive air testing capable of detecting airborne agents other than flammable substances. There appeared to be no specific trigger for MFB notification about the incident, or at least none that was documented and clearly understood by ARFF and MFB. MFB attendance in the earliest stages of the incident would have resulted in the use of specialised air testing equipment that was unavailable to ARFF. MFB resources could have been deployed as much as three hours earlier.

Recommendation: Metropolitan Fire Brigade and Aviation Rescue Fire Fighting service review and enhance the existing mutual response Memorandum of Agreement to provide more timely notification and therefore immediate access to appropriate resources to respond to emergencies.

78. The method used to formally notify Victoria's emergency services was appropriate, although this notification was later than is considered desirable. Consensus arising from agency interviews and debriefs is that the decision could have been made much earlier. Early notification would have ensured that the range of key emergency service agencies with the specialist expertise and capability to respond to the incident, were available to provide advice when crucial decisions were being made.

Recommendation: All agencies review formal and informal incident notification processes to ensure they support the earliest possible reporting of emergencies to all stakeholders involved in the Airport Emergency Plan and in so doing, ensure early access to specialist advice and support.

79. Informed decision making is important in the early stages of an emerging incident to identify the cause of the incident in cases of possible chemical, biological or radiological origin. This part of the process would be assisted by the development of additional documentation that identifies the decision making process and associated specialist resources required. Limiting reliance to a



single testing methodology to identify the source or determine the cause may actually reduce the probability of actually doing so.

80. The State's Chief Health Officer has highlighted this process is not currently documented under existing plans. It could be developed in the form of a flow chart that identifies diagnostic pathways to support decision making and planning. He has suggested that OESC convene a working group to develop such a flow chart. This would also minimise the risk of excluding possible options to determine the cause if decision making is based solely around organisational priorities and capabilities.

Recommendation: The Office of the Emergency Services Commissioner convene a working group of key emergency services and emergency management agencies to develop a flow chart based on scenario testing, to support decision making and the assessment of response requirements to medical, hazardous materials and CBR emergencies including their transition from one type to another.

- 81. Delayed notification precluded Victoria Police from managing the evacuation of the terminal and initially carrying out its responsibilities for media coordination. This is addressed elsewhere in the report.
- 82. The review was concerned to identify whether capability issues associated with the emergency response had an impact on the management of the incident or the outcome. Of particular interest was whether appropriate expertise and specialised equipment were utilised during the incident. ARFF firefighting resources are described elsewhere and meet the requirements of aviation authorities for the provision of firefighting rescue services at Melbourne Airport. Early in the incident, the possibility that there may have been some airborne component was considered by the ARFF Incident Controller, but he believed it was more likely a medical issue.
- 83. Air testing was initiated using ARFF issued equipment designed to test for flammability. The equipment is not designed for, and not capable of, testing for biological or chemical contaminants. ARFF maintains splash suits defined as Category B personal protective equipment. It also maintains breathing apparatus. It does not enable ARFF personnel to operate in circumstances where exposure to agents that could be absorbed through the skin might be present. The ARFF Incident Controller was aware of MFBs air testing capability and availability of specialist personnel.
- 84. MFB maintains fully encapsulated gas suits defined as Category A personal protective equipment for use in conjunction with breathing apparatus, where isolation from the surrounding atmosphere is required. MFB maintains air testing equipment designed to test for flammability. It also maintains more sophisticated and comprehensive air testing equipment capable of detecting chemical agents and foreign substances. This capability is also supported by MFB scientific personnel.
- 85. The review notes that comprehensive air testing even at the earliest stages of an incident may be unable to detect a cause. Air handling units in the terminals



automatically switch to spill mode if the fire detection system activates. The effect of the spill mode is to exhaust air out of the terminal. This is also likely to remove the causative agent.

- 86. Air testing for flammability undertaken by ARFF firefighters did not produce any abnormal results. Approximately three hours elapsed before MFB was able to begin air testing to identify whether other airborne agents were present. MFB was not notified about the incident until 11.54am. In the hours following their arrival, MFB scientists were unable to determine anything of significance resulting from the air testing relating to a possible cause.
- 87. Encapsulated gas suits and specialised air testing equipment used by MFB require specialist training and regular experience in their use to improve expertise. MFB has a limited number of firefighting personnel with the specialist training required to operate the equipment.
- 88. The review considered whether ARFF should have the same capability as MFB to undertake this specialised comprehensive air testing. Development of this level of capability would require a significant investment in resources and training, with potential implication for ARFF nationally. The review believes that ARFF would have limited opportunity to use such equipment given the nature of the incidents to which it responds at the airport. It would have difficulty maintaining the level of expertise that only comes through regular use at incidents. It is unlikely that augmented training or exercising would overcome the limitation of involvement in a small number of incidents at which it could be used.

89. The review believes that the MFB should provide the primary capability where the incident requires testing and analytical capability for agents other than for flammability.

- 90. Municipal coordination arrangements were implemented and an emergency relief centre was established at Broadmeadows. Catering arrangements were also in place to receive evacuees had that option been exercised. The Salvation Army remained at the airport throughout the day providing for the welfare of evacuees. These arrangements were reported to have worked well.
- 91. The Emergency Coordination Centre (ECC) at the airport was opened in accordance with agreed plans, but Victoria Police chose not to utilise it during the incident. The ECC is located several hundred metres from the southern terminal. Emergency services personnel, who would normally have worked from the ECC, gathered instead along with personnel directly engaged in operational aspects of the incident at the airport terminal. Ironically, these personnel established their command and control infrastructure in the area designated in the Airport Emergency Plan as the evacuation assembly area for the southern terminal.
- 92. Use of the ECC would have provided a venue for key personnel to exchange information throughout the incident. It would have assisted in the separation of incident operations from coordination activity. This would have reduced convergence, facilitated the police liaison role in media coordination, and contributed to reduced media congestion at the terminal.



- 93. Implementation of planned arrangements and structures such as the use of the ECC provides all stakeholders with certainty reinforced by the familiarity that this brings. Use of the ECC more frequently during small scale incidents is more likely to ensure that it is used effectively at large or complex incidents.
- 94. The review believes that Victoria Police should use the airport Emergency Coordination Centre at future incidents.

Recommendation: Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan, to consider the use of alternative locations for staging, evacuation, assembly and incident coordination to increase separation of emergency operations from non emergency activity be adopted.

Media Coordination and Public Communications

- 95. Effective communications with the media and the public during an emergency are critical to management of the incident. Accurate and timely information reduces the likelihood of speculation and assists the community to make informed decisions about their own actions during emergencies. It is important therefore that particular attention is paid to coordination of information disseminated to the public.
- 96. Throughout the incident, information communicated to the public was inadequate, particularly with regard to travel needs. Information conveyed to Virgin Blue by the emergency services concerning the likely duration of the incident, was not sufficient for the airline to plan its ongoing operations. It appears that neither the agencies, nor the airline fully understood each other's respective priorities. Expectations for the incident were established as short term timelines on an hour by hour basis, rather than a longer projection. This was consistent with normal airline timeframes usually applied to weather related or maintenance problems.
- 97. Information conveyed to passengers reflected this short term thinking and continued to be presented in those terms throughout the day. It was clear from the debrief and interview process, that once the terminal was closed, it was more likely to remain closed for at least four to six hours, rather than one or two hours. Better quality information for communication to the travelling public should be available if other recommendations made in this report as part of the emergency planning process are implemented.
- 98. With the exception of MAS, electronic and print media were aware that there was an incident at the airport much earlier than Victoria's emergency services. It is likely that media knowledge of the incident occurred as a result of its monitoring of emergency services radio communications. As early as 9.30am, a metropolitan television station telephoned an MFB controller at Emergency Communications Victoria's Tally Ho centre seeking information about the incident. At that stage, the MFB had no knowledge of the incident.
- 99. MAS directed its personnel not to enter the terminal at around 9.30am using the MAS radio network. The instruction related to the need for MAS personnel to withdraw from the terminal with the patients that they had identified and was consistent with MAS protocols during such incidents. The decision to evacuate passengers from the southern terminal was not made for a further half hour.



Evacuation in this instance, referred to the requirement to move anyone in the terminal, employees, passengers and visitors to nominated evacuation assembly areas outside the building. The area chosen was not the one nominated in the Airport Emergency Plan.

- 100. At various times during the incident, media releases, radio interviews and agency communications loosely used terminology that included words such as odours, toxic, chemical, noxious and that people were 'dropping like flies'. Collectively, the use of such language, which was accessible to the media, would have contributed to the perception of the incident as one with particular characteristics and significance. This highlights the need for emergency services to reinforce a disciplined approach when using communications systems such as voice radio networks.
- 101. It would have been reasonable given the location of the incident and the language used to describe it, for assumptions to be made by the media that this was a major chemical emergency with security implications involving mass casualties. This was never the case. The actual people who were ill were few in number. No cause has been found, chemical or otherwise, and no security link to the incident has been identified. Terminology to characterise such incidents should be used carefully and should not be open to alternative definition.
- 102. Issues concerning terminology should be addressed by emergency service agencies and be reflected in their plans and procedures.
- 103. Operational briefings for emergency services personnel were conducted at a location which was relatively open and accessible. Consequently, the media were present when these briefings were underway and could overhear their content. Operational briefings are forums at which plans and decisions are developed and modified. There is a significant risk that unauthorised information obtained by the media overhearing such briefings may be incomplete or inaccurate.
- 104. The media should not normally have access to operational briefings.
- 105. Individual emergency service personnel provided radio interviews to the media prior to the arrival and coordination of media communications by Victoria Police media liaison staff. This was contrary to the agreed process for media coordination in a multi agency event and contributed to fragmented communications about the incident. There is a significant risk in such events that uncoordinated release of information to the media or to the community will be incorrect or inconsistent.
- 106. Coordination of media communications at the airport could have occurred much earlier if Victoria Police had been informed about the incident in its earliest stages. Police media liaison would have been responsible much earlier for obtaining and disseminating the collective input from the emergency services. This would have included information to be communicated publicly, including information for the travelling public. Police coordination would have provided a single point of focus for the media, and would have provided a structure within which the media could operate. This could have included the conduct of media



briefings at the airport emergency coordination centre, ensuring it did not compromise operational activity.

107. The review recommends that Victoria Police and Melbourne Airport Management develop a Memorandum of Understanding (MoU) that addresses the management of media and public communications at Melbourne Airport. This would enhance and extend the general arrangements for media liaison described in S.4.4.5 of the State Emergency Response Plan in the Emergency Management Manual Victoria. The MoU should form a part of the Airport Emergency Plan.

Recommendation: Victoria Police, Melbourne Airport management, airlines and emergency services develop a Memorandum of Understanding for media coordination and public communications at Melbourne Airport that documents the responsibility for media coordination during emergencies to Victoria Police.

The Emergency Response and Impact on Continuity of Airport Operations

- 108. The critical role of Melbourne Airport in national transport is described earlier in this document. So too is the impact of the eight hour closure of the southern terminal and the flow on effect to domestic passenger activities for two days, particularly for Virgin Blue.
- 109. Temporary closure of airports is not unique, with weather conditions such as fog and storms causing delayed and redirected flights. The major difference between these reasons for airport closures and the incident of 21 February is that generally a degree of certainty about the closure is known i.e. the approximate time fog will lift or a severe storm front will move away. This knowledge allows airports and airlines to coordinate aircraft movements, divert to other airports, and transferring flight staff to hotel accommodation to avoid exceeding duty time limitations.
- 110. Knowledge of even the minimum time period likely that an airport or a terminal will be closed is essential for airlines to implement pre existing contingency plans required to minimise passenger and flight disruption. Virgin Blue claims that until mid afternoon, it understood that the terminal would be closed for a one or two hour period only. Melbourne bound Virgin Blue flights continued to land at the Airport. In some cases this meant passengers remained in aircraft on the tarmac for up to three hours. Virgin Blue has undertaken its own review of its response to the incident. It has identified a number of recommendations and intends to implement them nationally.
- 111. Despite regular requests at the hourly briefings, neither airport management nor Virgin Blue received information concerning the likely duration of air testing. The completion of air testing had a direct bearing on information relating to the closure of the terminal. A better understanding of the business imperatives and potential alternatives available to the airline by response agencies may have led to more appropriate and timely information from the incident control agency. This may have reduced the impact on domestic passenger services, minimising public criticism.



112. It would therefore be appropriate that response agency commanders, airport and airline management develop a greater understanding of the capabilities and operational imperatives each has to face given the potential impact such incidents can have on air transport nationally. This information should be available to all stakeholders during the planning process.

Recommendation: Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan, to ensure that the capabilities of agencies are adequately documented and understood by all stakeholders and that all agencies, including airlines are represented at the appropriate organisational level on the Airport Emergency Planning Committee.

- 113 Any safe reduction in the time an airport or terminal is closed in the event of an incident will minimise the subsequent impact on the public. When the evacuation of the southern terminal was ordered, both the international and northern terminal remained open and operated as normal. This was possible due to the nature of the operation of the airport air conditioning system. With the southern terminal air conditioning set to exhaust air and the remaining terminals drawing air in, the pressure difference prevented any potentially tainted air being drawn in to the international terminal. Airport engineers believe there may be an opportunity to further segregate parts of the terminal using the air conditioning system. This could potentially permit staged or progressive safe reopening of parts of a terminal.
- 114. As the airport is a known controlled environment, greater understanding of the building layout, segregation and air handling systems by relevant response agencies combined with pre planned response strategies in the form of tactical plans derived from scenario testing may be possible. This type of tactical planning could increase knowledge and understanding concerning likely operational impacts on airline operations. This enhanced knowledge would enable timely implementation of contingency arrangements by airports and airline operators.

Recommendation: Melbourne Airport management, the emergency services and airlines develop risk based tactical plans that, where safe and appropriate, allow the staged or progressive closure or re-opening of terminal space to support continuity of airport operations during emergencies.

115 During the incident, authorised Aviation Security Inspectors from the Department of Transport and Regional Services' Office of Transport Security were present to assess any impacts on the regulatory aviation security outcomes. They were able to monitor compliance and the security implications associated with any proposed temporary arrangements for the operation of the airport or airlines. They offered to assist the Incident Controller should he require security advice. Aviation Security Inspectors found no evidence of failure to comply with security requirements during this incident. The Department of Transport and Regional Services also advised that none of the preventive or response measures identified in the National Counter Terrorism Plan were triggered as a result of the evacuation.



- 116. Victoria Police investigations have not revealed evidence of any criminal intent associated with the incident.
- 117. It is important in the context of the current security environment, that any emergency planning arrangements are mindful of the security implications related to airport operations, in particular the implications of evacuation into areas off limits to unauthorised persons.

Recommendation: Melbourne Airport Emergency Planning Committee review the Airport Emergency Plan to confirm that it is appropriate in addressing, protection of public safety, the current security environment and the timely restoration of airport operations and that it is consistent with state emergency response planning arrangements.

Cause of Illness

- 118. Air testing initially was undertaken by airport engineers for breathability, by ARFF for flammability and in the subsequent hours by MFB scientists to detect foreign materials or other agents. None of this testing produced abnormal results and consequently MFB was unable to determine a cause of the illness. Two factors compromised the MFB testing process and reduced the likelihood that it would produce measurable results.
- 119. Firstly, an early and appropriate, decision to turn the air conditioning system in the southern terminal to spill mode, is likely to have removed any agent that may have been present in the air, along with clean air that was exhausted from the terminal. Secondly, as a consequence of the 3 hour delay in requesting that it attend the incident, the likelihood of MFB air testing identifying a causative agent was further reduced.
- 120. DHS conducted an epidemiological study into the incident. The results of this study were such that DHS was unable to come to a definitive conclusion about the cause of the illness. On the basis of the results, the Chief Health Officer was able to rule out common exposure to food or water as a cause. The symptoms displayed by the affected individuals were relatively non-specific and did not correlate closely with any particular illness. While the initial concern in the first phase of the response to the incident was the possibility of an airborne chemical, available air monitoring data were unable to confirm this theory. DHS considers that in the absence of further evidence, a cause for the incident may never be known.
- 121. Of the total group that sought medical attention, DHS confirmed that a number displayed symptoms of illness including nausea, headaches and vomiting. DHS also confirmed that some of those who were ill reported that the symptoms remained for up to several days.
- 122. Testing of airport air conditioning systems by airport engineers confirmed that there was no fault or leak in the system supplying the southern terminal prior to or during the incident. The main airport chiller system is located approximately 150 metres from the terminal. Melbourne Airport does not locate refrigerant



throughout terminal buildings for use in the main air conditioning system. On this basis, airport management argue that it is not possible for refrigerant to have caused the illness.

123. On the basis of the information available to it, the review is unable to determine the cause of the illness. The review agrees with the DHS assessment that unless additional information becomes available, it is unlikely that a cause will be established.

Conclusion

- 124. On 21 February 2005, State and Commonwealth emergency services were involved in a multi agency response to an incident at Melbourne Airport resulting in the evacuation and closure of the southern terminal housing Virgin Blue Airlines. The incident began at around 7.12am as a medical response by the Aviation Rescue and Fire Fighting (ARFF) service to a collapsed female and concluded shortly after 6.00 pm with the reopening of the southern terminal.
- 125. Within the first two hours, six workers at the airport presented to attending ambulance officers with signs that they were unwell including nausea, dizziness, headache, and shortness of breath or vomiting. By the end of the day 57 people had been seen by ambulance officers, 47 of whom were transported to hospital. All, but one person with an underlying medical condition were released the same day. Some of the people affected, reported symptoms for up to a week following the incident.
- 126. Airport air handling systems expelled air from the affected area during the incident enabling the international terminal and Qantas domestic terminal to continue operations. This may also have expelled any agent that may have been present along with the air from the terminal.
- 127. The MFB used its specialised air testing equipment in an attempt to locate the source of the incident, commencing some three hours after the initial reports, but found nothing significant. The MFB was unable to identify a responsible agent or determine the cause.
- 128. Epidemiological studies conducted by the DHS have not determined a cause of the reported illnesses. In the absence of additional information, DHS believes that the cause is unlikely to be determined.
- 129. The incident highlights that, under existing operational protocols, an event involving as few as two to three people can prompt a decision to shut down critical national transport infrastructure. ARFF routinely responds to such incidents, although this is the first time that airport operations have been as seriously affected. Since the incident, the ARFF has attended four similar single person medical events at the airport.
- 130. The review identified coordination shortcomings involving a range of agency processes during the incident. While these did not materially affect the outcome in terms of public safety, they contributed to the public perception that the incident was not well managed.



- 131. Formal and informal notification processes during the early stages of the incident did not work as expected. This delayed the attendance of personnel whose collective expertise would have contributed to crucial early decision making. Limited air testing capability available to ARFF and the circumstances in which people were presenting with symptoms of ill health, influenced the management of the incident in its early stages as a medical event and prompted a belief by the ARFF Incident Controller that DHS was the responsible control agency.
- 132. The incident highlighted the need for multi agency notification at the earliest possible time to ensure delivery of a comprehensive emergency response to the incident with the correct mix of specialist resources. It also highlighted the need for regular engagement of all relevant stakeholders from State and Commonwealth agencies and airlines in planning, scenario testing and exercises in preparation for such incidents.
- 133. The coordination of information to the media and to the general and travelling public was poorly managed. Uncoordinated information was released through interviews and media releases by individual agencies during the initial stages of the incident. This introduced a variety of messages about its nature that were unhelpful. Consequently, significant misinformation describing the incident as noxious, toxic and chemical in nature was communicated publicly. This was improved when Victoria Police media liaison personnel arrived and coordinated media communications in accordance with Victoria's Emergency Management Arrangements.
- 134. There is a need to improve the understanding by the state's emergency services, Melbourne Airport and Virgin Blue about each others priorities and timelines, in protecting public safety, responding effectively to the emergency and maintaining national airline operations. This was reflected in the quality and timeliness of information sought and provided concerning the reopening of the southern terminal. Inadequate information flow affected planning decisions that contributed to disruption of domestic air transport nationally for up to two days.
- 135. The review confirmed that Victoria's Emergency Management Arrangements involving State and Commonwealth agencies provide a sound and appropriate framework for managing multi-agency incidents such as this.
- 136. The identified shortcomings arise from insufficient detail concerning the application of the arrangements in documented plans and procedures, or from divergence from agreed processes, rather than flawed arrangements. In many instances they were the result of a lack of knowledge concerning the arrangements or the capability of other agencies involved.
- 137. Strategic and operational debriefs, and interviews with State and Commonwealth agencies, confirmed that a high level of cooperation occurred in the interaction among jurisdictions and agencies during the incident.
- 138. The transfer of control of the incident from ARFF to the MFB, although later than desired, occurred seamlessly. Agency debriefs reinforced the appropriateness of the decision to manage it as a hazardous materials incident and the decision to evacuate the southern terminal.



- 139. The review received strong support and cooperation from agencies and personnel who were interviewed. This included Victorian emergency services and departments, Commonwealth agencies, Melbourne Airport and Virgin Blue.
- 140. The recommendations in this report reflect agency learnings from the incident that can be incorporated in future planning and response arrangements. The substance of the recommendations was discussed during interviews with the relevant agencies. The review believes that the recommendations should find general acceptance among key stakeholders.



Attachments

- A. Incident chronology
- B. List of interviews and debriefs
- C. Existing Memorandum of Agreement between MFESB and Airservices Australia (ARFF)
- D. Plan of southern domestic terminal



Attachment A

Incident Chronology

0712	Report of female collapsed in mezzanine level of southern terminal
0716	ARFF on scene
0725	MAS on scene – female transported to Northern Hospital
0848	Report of female collapsed in newsagent
0855	ARFF on scene. Airport senior management on scene
0902	Female American Express employee collapses on mezzanine level
0905	Area cordoned off. Air sampling by airport staff undertaken
0915	MAS on scene. MAS relocate triage to outside terminal
0930	MAS report six patients
0930	Media contact MFB FSCC regarding incident at airport
0930	ARFF Senior Commander advises Air Traffic Management of situation and possible closure of terminal
0933	MAS Operations Manager advises over radio that crews are not to enter terminal until he and Group Manager arrive
0934	ARFF Senior Commander on scene
0945	ARFF Commander and MAS Commander discuss situation. MAS advise evacuation of terminal
0949	Southern terminal air conditioning set to full fresh air mode
0950	MAS Commander contacts DHS at request of ARFF Commander – reaffirms possible exposure to substance and advice to evacuate
0955	Two Virgin Blue staff present at triage area. ARFF Commander closes terminal and orders evacuation
1000	Evacuation of southern terminal commenced
1005	MAS staff are advised via radio to wear personal protective clothing
1009	Victoria Police are contacted via 000 and advised of evacuation
1011	Police communications advise police media
1013	MAS is interviewed on 3AW
1015	Victoria Police on scene
1015	Media taking footage in the terminal forecourt
1015	Melbourne Airport arranges disembarking of arriving Virgin Blue aircraft



	through freight terminal
1020	All southern terminal air handling units turned to outside spill (no supply)
1024	Victoria Police Communications Centre contacts MFB Communications Centre regarding incident control point and are advised ARFF on scene and are controlling incident
1029	Melbourne Airport is interviewed on 3AW
1030	ARFF conducts briefing involving MAS, Melbourne Airport, Virgin Blue, Australian Federal Police, Victoria Police and ASIO.
1034	Victoria Police Media Unit on standby
1038	MAS is interviewed on 3AW
1040	MAS discuss situation with DHS Public Health
1042	MAS is interviewed on 3LO
1043	Channel 7 interviews reporter at airport
1045	Customs area of international terminal report odours and a mist from air conditioning - explained as resulting from changes to southern terminal air-conditioning
1050	Victoria Police Media Unit requested to attend by Police Commander
1055	Salvation Army on site and providing refreshments
1055	Municipal Emergency Response Officer notified to activate local relief centre
1109	MAS advise via radio 17 patients transported to hospital and nine more at triage
1119	DHS public health staff on scene
1125	ARFF Incident Controller briefs DHS staff. DHS reaffirms not biological.
1125	Twenty two patients transported to hospital, 14 in triage.
1125	MAS is interviewed on ABC Radio
1135	ARFF and DHS discuss level and type of air testing – decision to request MFB attend with more specialised testing equipment
1144	MAS report 29 patients transported to hospital, 7 others checked and refuse transport
1145	DHS staff contact MFB Chief Fire Officer and MFB Manager Emergency Management requesting scientific staff and testing equipment
1150	MFB Chief Fire Officer contacts MFB Communications and advises of incident and requirement for MFB attendance
1154	Triple zero call to MFB requesting attendance
1200	Briefing to all agencies involved by ARFF Incident Controller



1200	First coordinated media conference
1203	First MFB appliances on scene- advise standing by until scientific staff arrive.
1218	MAS report 38 patients transported, eight refused
1225	MFB scientific staff arrive
1245	MFB Western Zone Acting Assistant Chief Fire Officer arrives and is briefed by ARFF
1300	All-agency briefing held
1310	Incident control transferred to MFB
1320	Ten Virgin Blue staff present at triage – believed to be result of sitting in sun
1325	DHS advised by Northern Hospital that those affected and transported are ready to return to the airport
1330	MFB develop incident action plan
1340	MFB commence testing of terminal
1400	All-agency briefing held. MAS advise 47 transported, 10 refused. MFB advise testing continuing with no results as yet and process will take time.
	Melbourne Airport request staged reopening of airport, denied by Incident Controller
1410	Treated patients arriving back from hospital
1500	All-agencies briefing. MFB still testing, nothing found. Melbourne Airport requests reopening of terminal, denied by Incident Controller.
1510	MAS report that no additional persons are presenting and they are scaling down their operations
1528	Unauthorised persons entering southern terminal from international terminal – additional security placed in area
1530	Media conference held
1610	All-agency briefing held. MFB report minute traces of identified, expected 'foreign' material detected. Melbourne Airport request staged reopening – denied by Incident Controller
1700	All-agency briefing. MFB complete checks of southern terminal, no results. Agencies advised incident close to completion.
1700	Second incident action plan prepared by MFB
1715	Air conditioning set to normal cycle and allowed to stabilise at request of MFB.
1730	DHS stand down from scene
1751	MAS stand down



1804	MFB give all clear
1804	Melbourne Airport check 'sterile areas' in company with DOTARS inspectors
1811	MFB close incident
1815	Melbourne Airport management inspect southern terminal
1830	Southern terminal reopened.



Attachment B

Organisations and Agencies Consulted

Airservices Australia (including Aviation Rescue and Fire Fighting)

Metropolitan Fire and Emergency Services Board

Metropolitan Ambulance Service

Emergency Communications Victoria

Victoria Police

Virgin Blue Airlines Pty Ltd

Australian Pacific Airports (Melbourne) Pty Ltd

Department of Human Services

Department of Transport and Regional Services

Debriefs Attended

- 22 February 2005 Emergency Services Media Debrief
- 28 February 2005 Melbourne Airport Incident Strategic Debrief
- 17 March 2005 Division 2 (Broadmeadows) Emergency Response Committee HazMat Debrief