

INFORMATION BRIEF

ISSUE	MELBOURNE BASIN COORDINATION INCIDENTS
DATE	8 February 2016

Purpose

To provide the background and review of two reported incidents involving coordination breakdowns in the Melbourne basin (12 November 2013 and 26 January 2016) to identify similarities, and to outline actions completed or proposed to prevent recurrence.

Background

12 November 2013

- Melbourne Tower was operating on runway (RWY) 16 for arrivals and departures. Essendon was operating on RWY 17 for arrivals and departures when a wind change necessitated a move to RWY 26 for arrivals and RWY 17 for departures.
- The prevailing meteorological conditions did not allow Essendon Tower to separate Essendon traffic arriving on RWY 26 with Melbourne traffic departing on RWY16 in the event that the Essendon traffic made a missed approach.
- Essendon Tower coordinated with the Melbourne terminal area coordinator, and normal practice is for that position to voice coordinate directly with the Melbourne approach controller.
- In this instance the terminal area coordinator called to the Melbourne approach controller but the approach controller did not acknowledge the coordination and subsequently did not take steps to ensure that traffic arriving for Essendon on RWY26 was sequenced with traffic departing Melbourne from RWY16.
- The omission was picked up around two hours later during coordination between Melbourne and Essendon towers. During the period in question, there were no missed approaches conducted at Essendon and no losses of separation as a result.

26 January 2016

- Melbourne Tower was operating on RWY16 for arrivals and RWY27 for departures when a wind change necessitated a move to RWY 16 for all operations.
- Prevailing meteorological conditions involved low cloud cover at both Melbourne and Essendon which meant that Essendon Tower was unable to assure visual separation of Essendon traffic from Melbourne operations.
- Neither Melbourne Tower nor Melbourne Terminal Control Unit advised Essendon Tower of either the impending runway change or the actual

airspace change. As a result there was a loss of separation between the first two departures from RWY16, VOZ309 and QFA408, and a helicopter in the northwest corner of Essendon airspace.

- Separation between the departures and the helicopter was 2.4 nautical miles (4.4 km) when 3 nautical miles (5.6 km) is required by radar unless visual separation is applied.
- The coordination omission and loss of separation was detected by the Essendon Tower controller as part of routine scanning.

Issues

- Both incidents involved a breakdown of coordination although between different operational positions
 - In the 2013 occurrence, it was from Melbourne terminal area coordinator to Melbourne approach
 - In the 2016 occurrence, it was from Melbourne tower to Essendon tower, and Melbourne approach to Essendon tower.
- The November 2013 incident did not involve a loss of separation.
- Both incidents were detected by air traffic controllers, rather than pilots or on-board aircraft systems

Actions Taken

12 November 2013 Occurrence

- Following the November 2013 incident and investigation, procedures were changed to involve Melbourne Tower in the required coordination as an additional control in the system.

26 January 2016 Occurrence

- An Airservices investigation is in progress in accordance with our safety management system. ATSB is also investigating and we will cooperate fully with that process.
- On 4 February 2016 Airservices conducted a workshop to review the threat and error management, and human performance aspects of runway change procedures at Melbourne and the impacts on the effectiveness of controls designed to manage risk.
- The immediate actions identified to improve the effectiveness of the coordination controls were the implementation of:
 - an electronic memory prompt in the tower system (implemented)
 - a checklist on Melbourne terminal area for runway changes (expected to be implemented by 15 February 2016).
- In addition to any recommendations that arise from the investigation findings, Airservices is initiating a Melbourne Airspace Concept Plan to provide a strategic view of future operations, taking into consideration advances in technology for ground based and aircraft on board systems, and the proposed new parallel runway at Melbourne.