BREAKDOWN OF SEPARATION

On 31\textsuperscript{st} July the Australian Transport Safety Bureau (ATSB) issued a report into an aviation incident the previous October.

At 1500:51 Eastern Daylight-saving Time on 8\textsuperscript{th} October 2011, a breakdown of separation (BOS) occurred 59 km north-east of Armidale, New South Wales between a Boeing 737-8FE (737), registered VH-YVA, and a Gulfstream IV (G-IV), registered VH-CGF.

VH-YVA was flying Brisbane to Sydney and VH-CGF was \textit{en route} from Melbourne to Coolangatta, Queensland.

Both aircraft were under radar surveillance and subject to an air traffic control (ATC) service. The aircraft were on reciprocal tracks on air routes that intersected about 35 NM (65 km) north-east of Armidale.

The Australian Transport Safety Bureau (ATSB) established that the controller’s mental model for separation correctly identified the situation and included a plan to manage the traffic. However, the instructions that were issued to the pilot of the G-IV contradicted that mental model in that the controller cleared the G-IV for descent through and below the level being maintained by the 737. The progression towards the BOS continued when the controller did not recognise the error during the G-IV pilot’s read-back of the clearance.

Ultimately, the controller’s earlier correct level input into The Australian Advanced Air Traffic System allowed a system alerting function to activate. In response to that alert, the controller initiated compromised separation recovery actions to recover the required separation standard.

The ATSB identified a number of human factors and individual work processes that contributed to the occurrence. In addition, a safety issue was identified in respect of differences in the traffic alert phraseology between the Manual of Air Traffic Services and Aeronautical Information Publication (AIP). These differences increased the risk of non-standard advice being provided to pilots by controllers during compromised separation recoveries.

In response to this safety issue, Airservices Australia (Airservices) amended the AIP to enhance understanding of the criticality of any safety alerts and avoiding actions being provided to flight crew. This amendment came into effect on 28\textsuperscript{th} June 2012.