Aviation Safety Investigation Report 199504425

Airbus Airbus Airbus Airbus

27 November 1995

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NOTE: All air safety occurrences reported to the ATSB are categorised and recorded. For a detailed explanation on Category definitions please refer to the ATSB website at www.atsb.gov.au.

The Bureau did not conduct an on scene investigation of this occurrence. The information presented below was obtained from information supplied to the Bureau.

Occurrence Number:			Occurrence Type: Incident		
Location: State:	175km S Atmap Other		Inv Category:	4	
Date: Time: Highest Injury Level:	Monday 27 Nov 0330 hours None	ember 1995	Time Zone	UTC	
Aircraft Manufacturer:	Airbus				
Aircraft Model: Aircraft Registration:	A300 PK-GAO				Serial
Type of Operation:	Air Transport High Capacity International Passenger Scheduled				Number:
Damage to Aircraft: Departure Point: Departure Time:	Nil Brisbane QLD	•			
Destination:	Bali Indonesia				
Aircraft Manufacturer:	Airbus				
Aircraft Model: Aircraft Registration:	A300 PK-GAP				Serial Number:
Type of Operation:	Air Transport Scheduled	High Capa	High Capacity International Passenger		
Damage to Aircraft: Departure Point: Departure Time:	Nil Sydney NSW				
Destination:	Bali Indonesia				

Approved for Release: Tuesday, May 7, 1996

Factual Information

GIA829 was maintaining flight level (FL) 350 on air route G326 and was estimating the flight information region boundary at ONOXA at 0330 UTC. This information was correctly coordinated by Brisbane sector control to Bali control.

GIA899 was maintaining FL 330 on air route A576 and had passed CURTIN at 0245 with an estimate for the boundary at ATMAP of 0347. This information was also correctly coordinated with Bali control and included the specific indication of a non-standard flight level.

During the coordination process, Bali control advised that they could not accept GIA899 at the non-standard level (FL 330) and required that aircraft at FL 350. Brisbane sector accepted this requirement and after checking his flight progress strips, the controller calculated that there would be 13 minutes between the two aircraft at Bali (Den Pasar). As the required standard is 10 minutes, he then instructed the crew of GIA899 to climb to FL 350.

At 0329 the Brisbane controller was checking his flight strips and realised that the flight plan time interval for GIA899 between ATMAP and Bali was approximately 10 minutes in error and the separation between the two aircraft was in fact only 2-3 minutes at Bali.

When the flight times were corrected, it was realised that GIA899 and GIA829 were already within the zone of conflict and that a breakdown in separation standards had occurred.

The Brisbane controller immediately initiated coordination with Bali control but it was some minutes before contact was made. When coordination was completed the Bali controller accepted responsibility for re-establishing separation and commenced distance checks from the two aircraft.

It is not known exactly which separation standard was affected by Bali control.

Analysis

When Bali control made the request for both aircraft to be at FL 350 it was based on the previous reported positions of the aircraft and the flight planned times from those positions to Bali. In the case of GIA899 this time interval was incorrect and contained an approximate 10 minute error.

As both Brisbane and Bali control were using the same flight plan details, it is likely that both controllers considered that a 10 minute separation standard existed. It was only when the Brisbane controller checked his time intervals against those being commonly used by other aircraft during the period, that the error was noticed.

The computer aided strip printing system only provided a proportional breakdown of the block times notified on the flight plan. In this case, the first block times were correct and there was no trend to alert control to any time interval error.

There was also a table of estimated time intervals provided on the control console for controller reference. This table had several erroneous time intervals included in its data and was commonly not used by controllers.

Findings

1. The flight plan for GIA899 contained an erroneous time interval.

2. The table of estimated time intervals held at the Brisbane control console contained several errors.

3. Bali control was unable to accept GIA899 at a non-standard level (FL 330).

4. Both the Brisbane and Bali controllers had information that indicated that a 10 minute separation standard existed.

5. All coordination between Brisbane and Bali was carried out in accordance with the Letter of Agreement.

6. Brisbane control issued a clearance for GIA899 to climb to FL 350 in accordance with Balis requirements.

7. The actual separation was approximately 2-3 minutes.

8. A breakdown in separation standards occurred.

Significant Factor

The flight plan details for GIA899 were errant, in that they contained an incorrect time interval between ATMAP and Bali.

Safety Action

As a result of the investigation, Brisbane ATS management have removed the erroneous time interval table from the console. It has been replaced with a table of average times for each type of aircraft using particular air routes.