

**Aviation Safety Investigation Report
199700761**

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09 March 1997

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As CZI climbed above about FL250, the Mach Number restriction to that aircraft began to take effect and a groundspeed differential developed between it and TJD. There was other traffic in the area at the time, with the labels for these aircraft reducing the information available to the controller concerning the separation of CZI and TJD.

The aircraft were transferred to the next sector (7V) when CZI was passing FL 280. By this time, the groundspeed of TJD was 425 kts, and of CZI, 368 kts. Horizontal separation was about 6 NM and reducing. The sector 7V controller instructed CZI to maintain FL280. The crew advised that they had passed that level but would return to it. TJD then reported leaving FL297.

Examination of the recorded radar data revealed that radar separation reduced to a minimum of 4.8 NM. At the time, CZI was at FL287 and TJD at FL297. The required separation standard was 5 NM laterally and 1,000 ft vertically.

Information from the Cairns Arrivals controller, and other experienced controllers, indicated that the effect of reduced Mach No climbs on aircraft performance was not fully appreciated. Local management reported that controllers had been rebriefed on this issue.

