

**Aviation Safety Investigation Report
199600321**

**Boeing Co
B767**

23 January 1996

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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:	199600321	Occurrence Type:	Incident
Location:	Near Melbourne, Aerodrome		
State:	VIC	Inv Category:	4
Date:	Tuesday 23 January 1996		
Time:	1940 hours	Time Zone	ESuT
Highest Injury Level:	None		
Aircraft Manufacturer:	Boeing Co		
Aircraft Model:	767-338ER		
Aircraft Registration:	VH-OGF	Serial Number:	24853
Type of Operation:	Air Transport Domestic High Capacity Passenger Scheduled		
Damage to Aircraft:			
Departure Point:	Melbourne Vic		
Departure Time:	1940 ESuT		
Destination:	Sydney NSW		

Approved for Release: Tuesday, December 3, 1996

The aircraft was dispatched from Melbourne with the auxiliary power unit unserviceable. Four minutes after takeoff, with the first officer manually flying the aircraft, the crew received messages indicating that a series of services had been lost. These included the left generator control, bus tie, both utility busses and associated systems including all three auto pilots and auto throttle. The aircraft was levelled at 10,000 feet while the crew carried out appropriate check list items.

At the completion of the checks all systems had been regained and the flight continued to Sydney.

Extensive maintenance checks in Sydney failed to disclose the reason for the loss of the left generator. The failure occurred within the systems associated with the left generator bus power control unit. Connectors T105 and C905 were inspected and cleaned, as were the left integrated drive generator connectors. The connectors were a common link within the systems that failed.

Cleanliness of connectors is a continuing problem with many current aircraft. Conditions that affect the performance of connectors include moisture ingress, and the corrosive result of that ingress. Certain cleaning compounds used on the connectors have been found to cause contamination of the connector pins resulting in loss of conductivity. The operator has a continuing program to improve connector performance across the fleet.

The aircraft was dispatched with an unserviceable APU in accordance with minimum equipment list requirements. When the left generator failed the aircraft was being manually flown therefore the loss of automatic flight systems was not critical. The auto load shed system functioned to keep the remaining generator within its rated load parameters. When the crew restored twin generator operation the configuration met the minimum equipment list requirements and a return to Melbourne was not necessary.

