

**Aviation Safety Investigation Report
199700423**

**de Havilland Canada
Dash 8**

10 February 1997

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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:	199700423	Occurrence Type:	Incident
Location:	Blackwater-Emerald		
State:	QLD	Inv Category:	4
Date:	Monday 10 February 1997		
Time:	0500 hours	Time Zone	EST
Highest Injury Level:	None		

Aircraft Manufacturer:	de Havilland Canada		
Aircraft Model:	DHC-8-102		
Aircraft Registration:	VH-TNU	Serial Number:	203
Type of Operation:	Air Transport	Low Capacity Passenger	
Damage to Aircraft:	Nil		
Departure Point:	Blackwater		
Departure Time:	0815 EST		
Destination:	Emerald		

Approved for Release: Tuesday, March 25, 1997

The pilot reported that on entering the aircraft during the preflight inspection he noticed a strong chemical odour. Discussion with the duty tarmac engineer confirmed the aircraft had been sprayed for pest control the previous night. During the flight to Emerald the pilot began feeling ill. During the turn around at Emerald he contacted company operations and said that he was feeling ill, but was of the opinion that he was well enough to return to Brisbane. During the later stage of the flight from Blackwater to Brisbane, the copilot also started to feel ill and described the same symptoms that were affecting the pilot. Both pilots then used the crew oxygen system and began to feel better after about 10 minutes. On arrival Brisbane both pilots were unable to continue duty. Both pilots visited their medical examiners who were of the opinion that the pilots had been exposed to a poisonous substance.

Investigation revealed that the chemicals used to treat the aircraft were "Permakill" and "Permethrin". There are two separate treatments. One treatment is for disinsection and the other treatment is a surface treatment for cockroaches. The treatments are not normally carried out simultaneously, however, on this occasion they were. There were no instructions that required the treatments to be conducted separately. The chemical constituents of both agents are Dichlorvos and Chlorpyrifos. Both these chemicals are potentially dangerous, and the company has been advised to discontinue the use of such treatments. The recommended procedure for aircraft disinsection is spraying with synthetic pyrethroids which are quite safe for human exposure. The company has opted for this procedure to prevent a recurrence.