

**Aviation Safety Investigation Report  
199801263**

**Fairchild Industries Inc  
Metro 23**

**13 April 1998**

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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](http://www.atsb.gov.au).**

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**Occurrence Number:** 199801263                      **Occurrence Type:** Incident  
**Location:** Forestania  
**State:** WA    **Inv Category:** 4  
**Date:** Monday 13 April 1998  
**Time:** 0925 hours                              **Time Zone**                      WST  
**Highest Injury Level:** None

**Aircraft Manufacturer:** Fairchild Industries Inc  
**Aircraft Model:** SA227-DC  
**Aircraft Registration:** VH-WBA                      **Serial Number:** DC-883B  
**Type of Operation:** Charter                      Passenger  
**Damage to Aircraft:** Nil  
**Departure Point:** Perth WA  
**Departure Time:** 0837 WST  
**Destination:** Forestania WA

**Approved for Release:** Tuesday, July 14, 1998

During the landing roll, the nose-wheel steering failed and braking efficiency reduced. After shutdown, the pilot observed hydraulic fluid coming from the front relief vent associated with the brake antiskid system. A permit to fly was obtained from the Civil Aviation Safety Authority and the aircraft was ferried to Perth with the landing gear down and locked. After landing, the aircraft was towed to the operator's facilities due to inadequate steering and braking capability. Maintenance investigation by the operator traced the problem to internal leakage of hydraulic pressure through the antiskid control valve to the low-pressure side of the brake system and then overboard. The problem was inherent with the antiskid-equipped aircraft and the operator was pursuing suitable rectification action with the manufacturer. Interim remedial action has been the introduction of a standard operating procedure to depressurise the hydraulic system after engine shutdown when parking the aircraft. Since the introduction of this procedure, there have been no further incidents.

#### Safety Action Statement

As a result of this occurrence, the Bureau of Air Safety Investigation is currently analysing a possible safety deficiency. The deficiency identified involves aircraft fitted with antiskid braking systems. This static internal leakage may result in the loss of hydraulic system contents and subsequent loss of all hydraulic services.

Any recommendation issued as a result of this analysis will be published in the Bureau's Quarterly Safety Deficiency Report.

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