BAE ATP, G-BTPJ, 26 April 1996

AAIB Bulletin No: 7/96 Ref: EW/G96/04/26Category: 1.1

Aircraft Type and Registration: BAE ATP, G-BTPJ

No & Type of Engines: 2 Pratt & Whitney PW-126 turboprop engines

Year of Manufacture:1989

Date & Time (UTC):26 April 1996 at 1330 hrs

Location: Stornoway Airport

Type of Flight: Public Transport

Persons on Board:Crew - 4 Passengers - 32

Injuries: Crew - None Passengers - None

Nature of Damage:Nil

Commander's Licence: Airline Transport Pilot's Licence with Instrument Rating

Commander's Age:34 years

Commander's Flying Experience:4,500 hours (of which 1,600 were on type)

Last 90 days - 220 hours

Last 28 days - 70 hours

Information Source:Aircraft Accident Report Form submitted by the pilot and telephonequeries by the AAIB

On approach into Stornoway airport in the landing configurationa **HYDRAULIC LOW LEVEL**warning appeared on the central warning panel. Flightdeck indications showed that both main and auxiliary hydraulicsystems had been lost. Neither of the two main hydraulic pumpswere supplying pressure and the brake accumulators were at 1900psi.

A go-around was flown with a subsequent diversion to Invernesswhere the surface wind was straight down the runway. A PAN callwas made as loss of hydraulics meant that there would be no steeringand that brakes would only have the pressure remaining in thebrake accumulator. A 29_flap landing was made and the aircraftcame to a halt approximately half way down Runway 24, five feetto the left of the centre line. There was no fire risk, so thepassengers left the aircraft by the forward steps to a waitingbus.

The source of the leak was traced to a split nose gear retractionjack flexible pipe; this was replaced, as were both hydraulicpumps as a precaution. The cause of the split pipe is being investigated by the operator and the manufacturer.

When all hydraulic fluid is lost from the main tank, a small proportion of the auxilliary tank contents may also be lost resulting inan auxilliary low level warning. In this case, it is believed that the crew could have recharged the brake accumulator by following the relevant QRH drill. However, as they had indications that auxilliary tank contents was also low they believed that they had no hydraulic fluid at all and did not action the drill.