**Aviation Safety Investigation Report 199603493** 

Piper Aircraft Corp Seneca

23 October 1996

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Investigations commenced on or before 30 June 2003, including the publication of reports as a result of those investigations, are authorised by the Executive Director of the Bureau in accordance with Part 2A of the Air Navigation Act 1920.

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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: 199603493 Occurrence Type: Accident

**Location:** 2.5km S Jandakot, Aerodrome

State: **Inv Category:** 

Date: Wednesday 23 October 1996

Time: 1824 hours Time Zone **WST** 

Highest Injury Level: None

Aircraft Manufacturer: Piper Aircraft Corp

Aircraft Model: PA-34-200T

VH-JOD Aircraft Registration: **Serial Number:** 34-7871062

**Type of Operation:** Other Commercial

**Damage to Aircraft:** Substantial **Departure Point:** Hyden WA

**Departure Time:** 

**Destination:** Jandakot WA

**Crew Details:** 

	Hours on		
Role	Class of Licence	Type Hour	rs Total
Pilot-In-Command	Commercial	7.0	6183

**Approved for Release:** Wednesday, November 20, 1996

The pilot reported he took a number of tourism industry passengers on a familiarisation flight over a proposed tourist route between Jandakot and Cervantes. He was on the return flight to Jandakot, with his second group of passengers on board, when he was forced to land the aircraft in a paddock due to fuel exhaustion.

The pilot had accumulated a lot of flying hours, predominately in helicopters, but had limited twin-engine, fixed-wing aircraft experience. He had recently completed an endorsement onto the aircraft type and had flown a total of 7 hours in the aircraft at the time of the forced landing. This included the 5 hours flown during the familiarisation flights.

On the evening prior to the occurrence, the pilot had filled the fuel tanks in preparation for the familiarisation flights. Before departing Jandakot on the first leg, he had drained 40 L out of the fuel tanks due to weight restrictions. He was not able to visually check the contents once he had drained the fuel and did not note the level before he started the drain. He paid little attention to the fuel guages enroute as he normally monitored fuel contents by using fuel flow and elapsed time.

During the return flight, the pilot elected to land at Cunderdin to correct a fuel imbalance which had appeared after he added 200 litres of fuel at Cervantes. He used a bucket and hose to transfer fuel between tanks. He reported that he was not aware of how fuel could be cross-fed between tanks whilst airborne.

The pilot became concerned about the state of the fuel contents enroute to Jandakot. He was convinced there was sufficient to continue to his destination, which was, by then, the closest airfield. The aircraft was less than 3 km south of Jandakot when the engines stopped.

Calculations indicate that a total of 620 L had been added to the aircraft before and during the flights. At the reported fuel flow of 94 L/hour a total flight time of 6 hours 35 minutes should have been available. The engines stopped after 5 hours, leaving 150 L unaccounted for. The pilot reported there had been recent instances of fuel theft from the Jandakot apron. As he had refuelled the aircraft the evening before the flights he suspected the missing fuel had been stolen during the night.