# Aviation Safety Investigation Report 198803452

## Piper PA38

## 21 April 1988

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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.**

**Occurrence Number:** 198803452 **Occurrence Type:** Accident
**Location:** Archerfield QLD
**Date:** 21 April 1988 **Time:** 1329
**Highest Injury Level:** Nil
**Injuries:**

| | Fatal | Serious | Minor | None |
|---|---|---|---|---|
| Crew | 0 | 0 | 1 | 1 |
| Ground | 0 | 0 | 0 | - |
| Passenger | 0 | 0 | 0 | 1 |
| **Total** | **0** | **0** | **0** | **2** |

**Aircraft Details:** Piper PA38
**Registration:** VH-JAM
**Serial Number:** 38-82A0078
**Operation Type:** Private
**Damage Level:** Substantial
**Departure Point:** Archerfield QLD
**Departure Time:** 1232
**Destination:** Archerfield QLD

**Approved for Release:** 26 October 1988

**Circumstances:**

During the preflight inspection, the pilot dipped the fuel tanks and noted that the left tank contained 25 litres and the right tank approximately 30 litres. The aircraft was taxied out to the run-up area using fuel from the left tank. Before the run-up, the pilot switched the fuel selector lever to the right tank and left it there for the takeoff and remainder of the flight. The pilot decided to finish the flight with a touch-and-go landing followed by a final circuit. Following the normal application of full power for takeoff, the aircraft climbed to 100 - 250 feet above the ground when the engine surged and lost all power. The pilot chose a football field straight ahead and made a successful touchdown. However, he became so engrossed with missing objects and steering the aircraft that he forgot to use the brakes effectively. The aircraft ran on and struck two goal posts and a tree before coming to rest against a security fence. The two occupants exited without injury. The engine had failed due to fuel starvation when all the usable fuel from the right fuel tank had been consumed.

**Significant Factors:**

It was considered that the following factors were relevant to the development of the accident

1. The pilot did not use a printed (and available) checklist for the downwind checks, and overlooked changing the fuel tank selection.

2. Flight training was deficient in that the pilot's instructor had encouraged the use of a memorised checklist.

3. The engine failed due to fuel starvation.

4. The pilot did not follow emergency procedures - the fuel selector was not changed to the other fuel tank.

5. The pilot failed to use wheel brakes once on the ground.

6. The pilot did not see the tree in time to avoid collision.

7. The pilot was inexperienced.

**Reccomendations:**

1. It is recommended that the Civil Aviation Authority highlight this accident in an education program, aimed at the Student/Private pilot, to emphasize the hazards of using a memorised checklist, especially when inexperienced or not in current flying practice.