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- safety data recording, analysis and research
- fostering safety awareness, knowledge and action.

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Collision with terrain, VH-LKI

Moree Airport, New South Wales

30 March 2011

Abstract

On 30 March 2011, a Piper Saratoga PA32R-301T aircraft, registered VH-LKI, with a pilot and five passengers on board was returning to Moree Airport, New South Wales, from Brewarrina, which was located 300 km to the west-south-west of Moree.

The aircraft was reported to have flown overhead the airport at about 2000 Eastern Daylight-saving Time before the pilot conducted what was reported to be a left circuit for a landing on runway 19. The aircraft was observed on a low approach path as it flew toward the runway during the final approach leg, before contacting trees and colliding with level terrain about 550 m short of the runway 19 threshold.

The pilot and three passengers were fatally injured. Two other passengers who were seated in the rear of the aircraft were seriously injured. The aircraft was seriously damaged by the impact forces.

The investigation is continuing.

FACTUAL INFORMATION

The information contained in this preliminary report is derived from the initial investigation of the occurrence. Readers are cautioned that there is the possibility that new evidence may become available that alters the circumstances as depicted in the report.

History of the flight

At about 0730 Eastern Daylight-saving Time¹ on 30 March 2011, the pilot of a Piper Saratoga PA32R-301T aircraft, registered VH-LKI (LKI), with five passengers departed Moree Airport for Brewarrina Airport, New South Wales.

It was reported that after arriving at Brewarrina, the pilot and passengers were driven around the local area to inspect cattle and a nearby property. Those activities concluded late that afternoon and the aircraft departed Brewarrina Airport at a reported time of about 1815.

The aircraft was reported to have flown overhead Moree Airport at about 2000. A recorded radio transmission from the pilot indicated that the aircraft was joining crosswind for a landing on runway 19. No further voice transmissions from the pilot were recorded.

A number of witnesses who were located along the aircraft's final approach path observed the aircraft flying lower than what they considered was the normal approach profile. The aircraft was seen to strike two trees within the boundary of a caravan park to the north of the airport. The aircraft subsequently collided with terrain in an inverted, nose-down attitude about 30 m beyond the park boundary.

¹ The 24-hour clock is used in this report to describe the local time of day, Eastern Daylight-saving Time, as particular events occurred. Eastern Daylight-saving Time was Coordinated Universal Time (UTC) + 11 hours

The aircraft was seriously damaged² by the impact forces. The pilot and three passengers were fatally injured. Two other passengers who were seated in the aircraft's rear seats were seriously injured.

Aircraft information

General information

The aircraft was a single piston-engine, propeller-driven, low-wing aircraft that had seating for a pilot and five passengers.

The aircraft, serial number 32R-8329020, was manufactured in the United States in 1983. According to maintenance records, LKI had accumulated about 1,765 hours total time in service (TTIS) and was certified for private operations under the night visual flight rules (VFR).

The pilot had been the registered owner of LKI since 26 August 2009.

Airworthiness and maintenance

The aircraft's maintenance records showed that the aircraft was maintained in accordance with the PA32R-301T Piper maintenance schedule for the airframe and engine, and with Civil Aviation Safety Authority (CASA) Schedule 5 for instrument, electrical and radio inspections. The aircraft had a current Certificate of Registration and Certificate of Airworthiness. The current maintenance release showed that the last recorded daily inspection certification was on 30 March 2011.

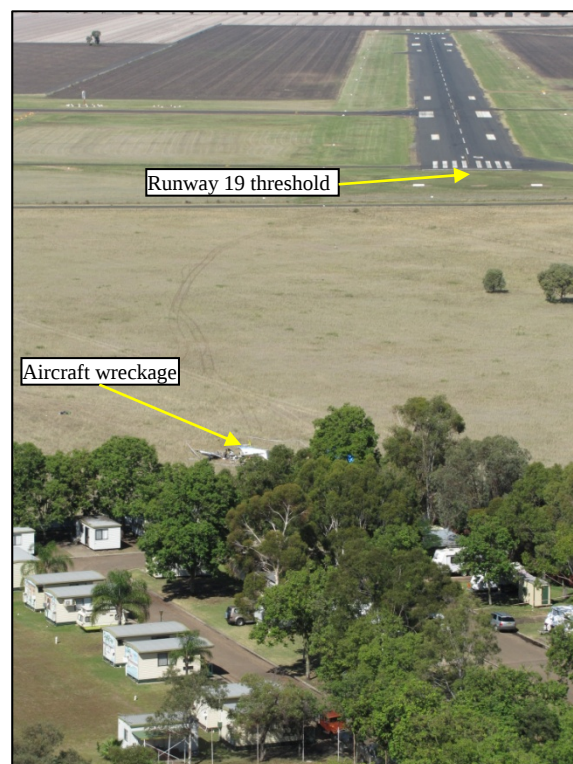
A 100-hourly periodic inspection was carried out in July 2010. Additional maintenance during that inspection included the replacement of the aileron cables with new items.

In July 2009, an overhauled Textron Lycoming TIO540-S1AD engine and a new propeller were fitted to the aircraft. At the time of the accident, that engine/propeller installation had accumulated about 113 hours TTIS.

Airport information

Moree Airport is located about 4 km to the south-east of Moree Township and is at an elevation of 701 ft (213 m) above mean sea level. The main runway, runway 19³/01 was 1,613 m long with a sealed surface. Runway 19 was equipped with pilot activated runway lights (PAL)⁴ and was suitable for night operations.

Figure 1: Relative position of the accident site to runway 19



Wreckage examination

The wreckage was located in a level, grassed paddock about 550 m from the runway 19 threshold and about 40 m to the left of the extended runway centreline.

On-site examination of the wreckage found no anomalies with the aircraft's flight control systems.

The aircraft's engine and propeller were removed from the accident site and transported to a secure

2 The *Transport Safety Investigation Regulations 2003* definition of 'seriously damaged' includes the 'destruction of the transport vehicle'.

3 The runway direction was 187° M.

4 PAL is activated by a series of timed transmissions by a pilot on either a discrete or the local airport communication frequency using the aircraft's very high frequency radio.



facility for further examination. Some of the aircraft's instruments and avionics were also recovered and taken to the Australian Transport Safety Bureau's facilities in Canberra, the Australian Capital Territory for technical examination.

FURTHER INVESTIGATION

The investigation is continuing and will include:

- the examination of the aircraft's engine, propeller and other recovered components
- a review of the aircraft's maintenance records
- an examination of the operational procedures affecting the flight.