

**Aviation Safety Investigation Report
199805537**

**Piper Aircraft Corp
Navajo
Gates Learjet Corporation
36**

06 December 1998

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Occurrence Number: 199805537 **Occurrence Type:** Incident
Location: Williamtown, Aerodrome
State: NSW **Inv Category:** 4
Date: Sunday 06 December 1998
Time: 1816 hours **Time Zone** ESuT
Highest Injury Level: None

Aircraft Manufacturer: Gates Learjet Corporation
Aircraft Model: 36
Aircraft Registration: VH-SLJ **Serial Number:** 36-014
Type of Operation: Non-commercial Other (including military)
Damage to Aircraft: Nil
Departure Point: Williamtown NSW
Departure Time: 1816 ESuT
Destination: Nowra NSW

Aircraft Manufacturer: Piper Aircraft Corp
Aircraft Model: PA-31
Aircraft Registration: VH-MYG **Serial Number:**
Type of Operation: Charter Cargo
Damage to Aircraft: Nil
Departure Point: Williamtown NSW
Departure Time: 1717 ESuT
Destination: Bankstown NSW

Approved for Release: Friday, August 20, 1999

FACTUAL INFORMATION

The crew of the Learjet registered as VH-SLJ and operating as Spider 14, had flight planned Canberra - Williamtown - Nowra and was preparing to complete the final leg. At the time, the control tower at Williamtown was unmanned and the control zone was operating as a mandatory broadcast zone (MBZ). While parked on the Royal Australian Air Force (RAAF) air movement section tarmac, the crew of SLJ was monitoring the MBZ frequency. They heard traffic information broadcast by the pilot of Navajo, VH-MYG and an Eastern Australia Airlines aircraft that were inbound to Williamtown. The two aircraft were self-separating and MYG elected to land on runway 12 and the Eastern aircraft positioned for a landing on runway 30. The wind was a light easterly from 070 degrees Magnetic.

The pilot of MYG was operating a "bank run" charter and had planned to make a quick turnaround at Williamtown. He landed MYG from a straight-in approach to runway 30 and, while on final approach, had heard Spider 14 make a general taxi broadcast on the MBZ frequency.

The crew of SLJ decided to depart from runway 12, which necessitated a long taxi on taxiway Alpha but less manoeuvring on departure. They made a general broadcast and reported lining up on runway 12. When approaching the threshold, they heard a taxi call broadcast by MYG so they broadcast on the MBZ frequency that their aircraft was rolling. As they commenced their take-off run from runway 12, they sighted MYG entering the runway 30 threshold from taxiway Juliet. The pilot in command considered aborting the takeoff but elected to continue because the aircraft was lightly loaded and would be airborne quickly. The crew saw the Navajo cross the runway and vacate into the operational readiness platform at the threshold of runway 30.

The pilot of MYG reported that during the turnaround at the civil apron, he remained in the aircraft and monitored the Williamtown MBZ frequency 118.3 MHz on the primary radio and the national advisory frequency 127.7 MHz on the secondary radio. After a short stop to offload one bag, he taxied MYG for a runway 30 departure and made a general broadcast to advise that he was taxiing. He reported that prior to entering runway 30, he scanned the runway and checked the final approach path and that on entering the runway, he made an entering and lining up broadcast. After making the broadcast he noticed the Learjet rolling towards him from the other end, and so vacated the runway to the operational readiness platform. The pilot of MYG did not hear crew of SLJ report lining up on runway 12.

A replay of the audio recording of the MBZ frequency indicates that the crew of SLJ did report lining up on runway 12 but that the pilot of MYG overtransmitted the last portion of the transmission. The crew of SLJ did not hear MYG report lining up on runway 30. Military staff informed the investigation team that the tower radio frequency at Williamtown (used as the MBZ frequency) had some gaps in its coverage.

Neither the crew of SLJ nor the pilot of MYG submitted an air safety incident report, which was required in accordance with AIP Australia ENR 1.14, paragraph 1.3.2.

ANALYSIS

The wind was a light easterly from 070 degrees magnetic and did not favour any particular runway. Mandatory radio broadcasts made on the MBZ frequency by the crews of both aircraft were appropriate and timely.

The pilot of MYG did not hear the "lining up" or the "rolling" broadcast made by the crew of SLJ due to limitations in the MBZ radio coverage. The crew of SLJ also did not hear the pilot of MYG report entering and lining up on runway 30 due to limitations in the MBZ radio coverage. The basis of this analysis is the tape recording of the event, where the pilot of SLJ had been transmitting for sometime before that transmission was overridden by the taxiing broadcast made by the pilot of MYG. As a result of the limitations of the radio coverage of the Williamtown MBZ frequency, the crews of both aircraft were prevented from developing accurate situational awareness.

The pilot of MYG did not adequately scan the runway prior to entry for takeoff.

SIGNIFICANT FACTORS

Neither crew heard the transmission of the other crew reporting lining up on the reciprocal runway.

The radio coverage of the Williamtown MBZ frequency was limited: the tower radio frequency at Williamtown (used as the MBZ frequency) had some gaps in its coverage.

The pilot of MYG did not adequately scan runway 12/30 prior to entry.

SAFETY ACTION

Local Safety Action

Williamtown ATS authorities issued a Notice to Airmen on 10 December 1998, alerting pilots of the unreliability of the MBZ frequency for ground-to-ground communications due to possible shielding.

Bureau of Air Safety Investigation Safety Action

As a result of this occurrence, the Bureau of Air Safety Investigation is investigating a perceived safety deficiency relating to limitations of the MBZ frequency.

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

