# LIMITED OCCURRENCE INVESTIGATION REPORT – FINAL

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| **Reference Number** | CA18/2/3/10625 | | | | | | |
| **Classification** | Accident | **Date** | 12 December 2025 | **Time** | 0930Z | | |
| **Type of Operation** | Private (Part 94) | | | | | | |
| **Location** | | | | | | | |
| Place of Departure | Bapsfontein Aerodrome (FABA), Gauteng Province | Place of Intended Landing | Bapsfontein Aerodrome (FABA), Gauteng Province | | | | |
| Place of Occurrence | On Runway 02 at Bapsfontein Aerodrome (FABA), Gauteng Province | | | | | | |
| GPS Co-ordinates | Latitude | 25° 59' 15.75" S | Longitude | 28° 24' 59.71" E | Elevation | 5267 ft | |
| **Aircraft Information** | | | | | | | |
| Registration | ZU-RLS | | | | | | |
| Make; Model; S/N | Magni Gyro; SRL-24C (Serial Number: 24159274) | | | | | | |
| Damage to Aircraft | Substantial | Total Aircraft Hours | 693.2 | | | | |
| **Pilot-in-command** | | | | | | | |
| Licence Type | National Pilot Licence (NPL) | Gender | Male | Age | 59 | | |
| Licence Valid | Yes | Total Hours | 82.3 | Total Hours on Type | 0 | | |
| Total Hours 30 Days | 4.6 | Total Flying on Type Past 90 Days | 0 | | | | |
| **People On-board** | 1 + 0 | **Injuries** | 0 | **Fatalities** | 0 | **Other (on ground)** | 0 |

**What Happened**

On Friday morning, 12 December 2025, a pilot on-board a Magni Gyro SRL-24C gyroplane registered ZU-RLS was conducting a private flight from Bapsfontein Aerodrome (FABA) in Gauteng province with the intention to land at the same aerodrome when the accident occurred. The flight was conducted under visual meteorological conditions (VMC) by day and under the provisions of Part 94 of the Civil Aviation Regulations (CAR) 2011 as amended.

The pilot reported that he conducted a pre-flight inspection of the gyroplane with no anomalies noted. The gyroplane had a total of 45 litres (L) of Avgas 100LL fuel in the tank. After the pilot had started the engine, he allowed it to run for a few minutes until all the indications were within the green arch. At approximately 0820Z, he opened the throttle to 5 300 revolutions per minute (RPM) and commenced with the take-off run on Runway 02. The gyroplane rotated and climbed to 6 300 feet (ft), headed to the general flying area (GFA). After about 35 minutes, the pilot routed back to FABA. Upon reaching FABA, the pilot assessed the windsock on the side of the runway and it favoured Runway 02 for landing. The gyroplane's approach speed was approximately 65 knots (kts). After landing and during the landing roll, the pilot felt a crosswind blowing from the left and the gyroplane drifted to the right. The pilot applied the left rudder to recover and back pressure to absorb the rotor energy to bring the gyroplane to a halt, but he was unsuccessful. Consequently, he lost control and the gyroplane rolled to the right during which the main rotor blades struck the ground. The gyroplane was substantially damaged. The pilot was not injured.


**Figure 1**: An aerial view of the runway used at FABA and the direction of landing (yellow arrow). (Source: Google Earth)


**Figure 2**: The gyroplane after the accident. (Source: Pilot)

**Figure 3**: The grass-covered runway that was used and the windsock in the background. (Source: Pilot)

The weather information in the table below was obtained from the South African Weather Service:

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| Wind Direction | NW | Wind Speed | 10 kts | Visibility | 9999 |
| Temperature | 22°C | Cloud Cover | SCT | Cloud Base | 2 500ft |
| Dew Point | 14°C | QNH | 1022 hPa | | |

The weather conditions indicated a crosswind at 10 kts that was blowing north-west (left side) on the day and time of the accident. According to the Gyroplane Pilot's Operating Handbook (POH), it has a maximum of 25 kts demonstrated crosswind component during landing.

Crosswind Landing (Source: FAA-H-8083-21 Rotorcraft Flying Handbook)

*The crosswind landing technique is normally used in gyroplanes when a crosswind of approximately 15 miles per hour (13 knots) or less exists. In conditions with higher crosswinds, it becomes very difficult, if not impossible, to maintain adequate compensation for the crosswind. In these conditions, the slow touchdown speed of a gyroplane allows a much safer option of turning directly into the wind and landing with little or no ground roll. Deciding when to use this technique, however, may be complicated by gusting winds or the characteristics of the particular landing area.*

*On final approach, establish a crab angle into the wind to maintain a ground track that is aligned with the extended centreline of the runway. Just before touchdown, remove the crab angle and bank the gyroplane slightly into the wind to prevent drift. Maintain longitudinal alignment with the runway using the rudder. In higher crosswinds, if full rudder deflection is not sufficient to maintain alignment with the runway, applying a slight amount of power can increase rudder effectiveness. The length of the flare should be reduced to allow a slightly*

*higher touchdown speed than that used in a no-wind landing. Touchdown is made on the upwind main wheel first, with the other main wheel settling to the runway as forward momentum is lost. After landing, continue to keep the rotor tilted into the wind to maintain positive control during the rollout.*

**Findings**

1. Pilot

1.1. The pilot had a National Pilot Licence (NPL) that was issued by the Regulator (SACAA) on 12 September 2025 with an expiry date of 11 September 2027. The pilot had a Class 4 aviation medical certificate that was issued on 27 May 2025 with an expiry date of 31 May 2028.

1.2. The pilot was not rated on the gyroplane type; he was only rated on weight shift or microlight aircraft.

2. Aircraft

2.1. The gyroplane had a valid Authority-to-Fly (ATF) Certificate that was initially issued by the Regulator on 3 October 2015. The ATF Certificate was reissued on 3 October 2025 with an expiry date of 2 October 2026. The gyroplane had the Certificate of Registration (C of R) that was issued by the Regulator on 10 December 2025.

2.2. The last annual inspection of the gyroplane was certified on 8 September 2025 at 650.1 total airframe hours after which a Certificate of Release to Service (CRS) was issued with an expiry date of 8 September 2026 or at 750.1 hours, whichever comes first. The gyroplane had a total of 693.2 hours at the time of the accident; it had accumulated a total of 43.1 hours since the last annual inspection.

2.3. An approved person (AP) who conducted the last inspection of the gyroplane had an AP Certificate that was issued by the Regulator on 18 February 2025 with an expiry date of 17 February 2027. The gyroplane type was endorsed in the AP's maintenance specification certificate.

2.4. The gyroplane was airworthy, and no technical defects were reported at the time of the flight or during the event leading up to the accident.

3. Environment

3.1. The recorded crosswind condition of 10 kts at the time of the flight was within the maximum demonstrated crosswind capability of 25 kts as specified in the Gyroplane POH.

**Probable Cause(s)**

Loss of directional control during the landing roll in crosswind conditions resulted in the gyroplane veering off to the right and entering a dynamic rollover to the right.

| **Contributing Factor(s)** |
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| Lack of experience. |
| **Safety Action(s)** |
| None. |
| **Safety Message and/or Safety Recommendation/s** |
| None. |
| **About this Report** |
| *The decision to conduct a limited investigation is based on factors including whether the cause is known and the evidence supporting the cause is clear, the level of safety benefit likely to be obtained from an investigation and that will determine the scope of an investigation. For this occurrence, a limited investigation has been conducted, and the Accident and Incident Investigations Division (AIID) has relied on the information submitted by the affected person/s and organisation/s to compile this limited report. The report has been compiled using information supplied in the initial notification, as well as from follow-up desktop enquiries to bring awareness of potential safety issues to the industry in respect of this occurrence, as well as possible safety action/s that the industry might want to consider in preventing a recurrence of a similar occurrence.*<br><br>*All times given in this report are Co-ordinated Universal Time (UTC) and will be denoted by (Z). South African Standard Time is UTC plus 2 hours.* |
| ***Purpose*** |
| *In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CAR) 2011 and ICAO Annex 13, this report was compiled in the interest of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and not to apportion blame or liability.* |
| **Disclaimer** |
| *This report is produced without prejudice to the rights of the AIID, which are reserved.* |

**This report is issued by:**

**Accident and Incident Investigations Division**
**South African Civil Aviation Authority**
**Republic of South Africa**