

## INTERIM STATEMENT

### Accident and Incident Investigations Division (AIID)

Accident  
- ZU-RKJ Interim Statement -  
AIID Ref. No: CA18/2/3/9666 Trojan Gyro



**Figure 1:** Wreckage as found at the accident site after been consumed and destroyed by post impact fire.

#### Description:

The pilot departed on a local flight from Klipdrift Farm to Parys Aerodrome (FAPY) and intended to land back at the Klipdrift Farm. The aircraft did not return, and was later found destroyed by post-impact fire with the pilot fatally injured.

## DESCRIPTION OF OCCURRENCE

Occurrence Reference	: CA18/2/3/9666
Occurrence Category	: Cat I
Name of the Operator	: CAD Mapping (Pty) Ltd
Manufacturer	: Wagtail Aviation
Aircraft Model	: Trojan Gyro
Engine Type	: Subaru
Nationality	: South African
Registration	: ZU-RKJ
Manufacture Serial Number	: 1306
Date of Manufacture	: 2013
Flight Hours/Cycles	: 270
Type of Flight	: Test
State of Occurrence	: South Africa
Place of Occurrence	: Davidsfontein Farm near Parys
Date and Time	: 21 November 2017 and 1500Z
Total Crew members	: 1
Total Passengers	: 0
Injuries to Passengers and Crew	: 1 +0 (Fatal)
Other Injuries	: None
Nature of Damage	: Destroyed

*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 of the Investigation:

*In terms of Regulation 12.03.1 of the Civil Aviation Regulations (CARs) 2011 this report was compiled in the interests of the promotion of aviation safety and the reduction of the risk of aviation accidents or incidents and **not to apportion blame or liability**.*

This ZU-RKJ anniversary Interim Statement reports back on the investigation progress and should be read in conjunction with the Preliminary Report with reference number CA18/2/3/9666 that was published on 21 December 2017.

The Interim Statement is released in accordance with International Civil Aviation Organization (ICAO) Annex 13 standard 6.6 and CARs Part 12.05.1(7).

Later Interim Statements/Reports, or the Final Report, may contain altered information in case of new evidence becoming available during the on-going investigation.

Any person who has information concerning this accident should contact the AIID on [AIIDinbox@caa.co.za](mailto:AIIDinbox@caa.co.za).

### Investigations process:

The occurrence was categorised with an AIID-assigned Accident Investigation File Number, CA18/2/3/9666 for this investigation.

The AIID formed an investigation team led by an investigator-in-charge (IIC) and members from the AIID for the relevant investigation aspects. The AIID is still leading the investigation and will issue a Final Report.

*AIID reports are made publicly available at:*

<http://www.caa.co.za/Pages/Accidents%20and%20Incidents/Aircraft-accident-reports.aspx>

**Disclaimer:**

*This interim statement is produced without prejudice to the rights of the CAA, which are reserved.*

**Interim Statement:**

The Interim Statement is released in accordance with of ICAO Annex 13 standard 6.6 and CARs Part 12.05.1(7).

The Accident occurred on 21 November 2017 at 1500Z and involved a Trojan Gyro, with registration ZU-RKJ, operating on a test flight (CAR 2011, Part 43.02.16) and departed from Klipdrift Farm in the Republic of South Africa, at 1437Z. The pilot was not rated as a test pilot in terms of CAR 2011, Part 61. The aircraft was fitted with a crops praying hub which releases Molopo granules used to destroy weeds during the month of October 2017.

The crop spraying system (hub and software) was removed from aircraft ZU-RKK (a gyro copter) and fitted to ZU-RKJ in October 2017. The registered aircraft owner [CADMAPING PTY (LTD)] returned the aircraft to the manufacturer due to the inability to obtain approval for the incorporation of the aerial survey equipment. The manufacturer (Wogtail\Von Ludwig JT) took the aircraft from the registered owner and fitted it with the crop spraying system which was not approved by the Regulator to be fitted on this aircraft (ZU-RKJ).

Following the installation of the crop spraying system, the pilot whom was said to be a potential buyer took the aircraft for a test flight to ensure the serviceability of the fitted crops praying system. The accident occurred whilst the aircraft was en route to Parys Airfield. The aircraft approached the accident site in a slight nose down attitude and impacted the ground with the nose gear first before rolling to the right hand side and the rotor blades impacting the ground.

The engine was taken to an approved Aircraft Maintenance Organisation (AMO) for further investigation, which determined that the engine was operating normal before impact. The main rotor blades damage indicate that the rotor was operating at a fairly low RPM on impact with the ground.

Regarding the main rotor operation, the Investigation is still analysing the main rotor to determine if there was pre-existing malfunctioning of the main rotor operation that could have contributed to the accident.

There are no safety recommendations issued at the time of releasing the interim statement. However, aircraft operators and pilots are reminded to adhere to the requirements of CAR 2011, Part 43.02.16.

AIID is continues to collaborate with the other organizations involved in areas of interest including flight operations, and aircraft systems.