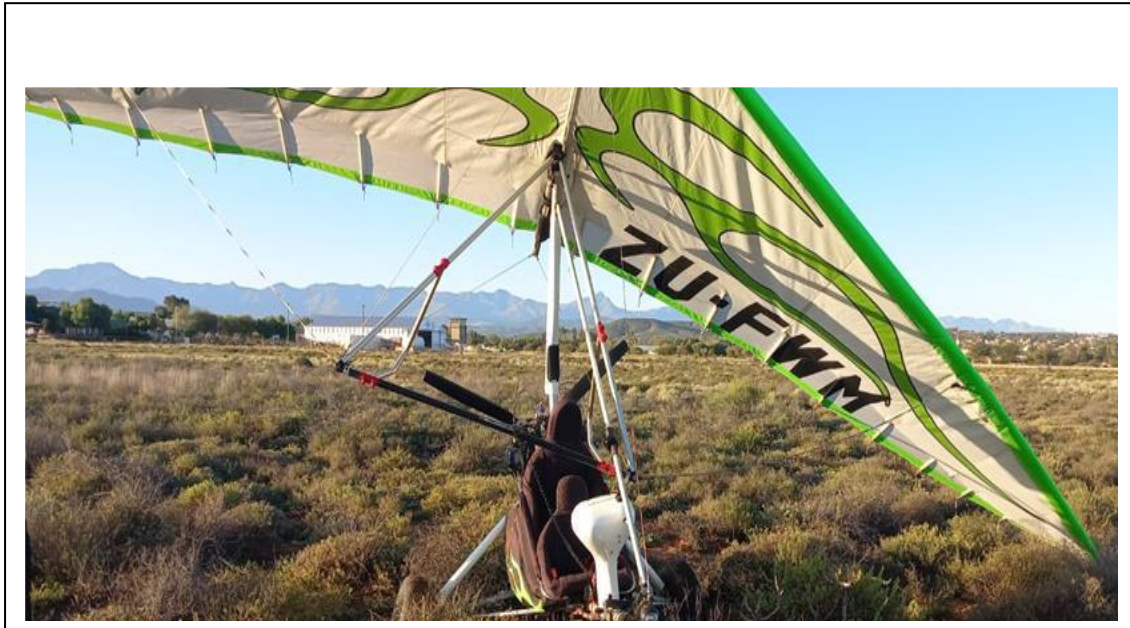


INTERIM STATEMENT ACCIDENT

Incident and Incident Investigations Division

Serious Incident
- Interim Statement -
AIID Ref No: CA18/3/2/1398



Description:

On Monday, 4 July 2022, a flight instructor and a student pilot on-board a Windlass Aquilla 912 Trike with registration ZU-FWM took off on a circuit training flight from Oudtshoorn Aerodrome (FAOH) in the Western Cape province, with the intention to land back at the same aerodrome. According to the flight instructor, they flew one circuit and landed uneventfully on Runway 22. However, while taxiing the trike to the apron on taxiway Alpha, the engine mount that supports the engine and the seat frame broke off which caused the seats to drop down a margin. This led to the throttle cable being pulled down before it got stuck in the open position (80% power); as a result, the trike accelerated sharply. The instructor steered the trike away from possible hazards before he brought it to a stop in a nearby field. The flight instructor and the student pilot disembarked from the trike; they were both not injured. The trike sustained damage to the engine mount (pylon) that failed, the rear axle, the radiator bracket that bent, and the carburetors that fell off during taxi.

NOTE

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 (CAR) 2011 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.***

The interim statement gives a brief account of the investigation progress and should be read in conjunction with the preliminary report with reference number CA18/3/2/1398 that was published on 10 August 2022.

This interim statement is released in accordance with Standard 6.6 of ICAO *Annex 13 and* CAR Part 12.05.1(7).

Later, the final report may contain altered information in case new evidence is uncovered during the on-going investigation.

Any person who has information concerning this accident should contact the Accident and Incident Investigations Division (AIID) at AIIDinbox@caa.co.za

Investigations process:

The occurrence was categorised as an accident and the Accident and Incident Investigations Division (AIID) has assigned an accident Investigation File Number CA18/3/2/1398 to this investigation.

The AIID has appointed the investigating team led by the investigator-in-charge (IIC) for this investigation. The investigators have co-ordinated with all authorities by initiating the accident investigation process according to CAR Part 12 and investigation procedures. The AIID is leading the investigation and will issue a final report.

The AIID reports are made available to the public at:

<https://www.caa.co.za/industry-information/accidents-and-incidents/>

Disclaimer:

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

Interim Statement

Since the release of the preliminary report on 10 August 2022, the investigating team is still in the process of determining and analysing the human performance factors that could have contributed to this accident. In addition, the investigators have reviewed the maintenance records and serviceability of the aircraft, and the findings will be discussed in the final report.

The following findings have been established thus far:

- The flight instructor (FI) reported that whilst taxiing the trike back to the apron on taxiway Alpha, the engine mount that supports the engine and the seats frame broke off, causing the seats to drop down a margin. This led to the throttle cable to be pulled down before it got stuck in the open position (80% power). The drop also pulled apart the magneto earthing cable, causing a “live” engine. As a result, the trike got into a high-speed taxi. The FI was unable to close the throttle because it was stuck in the open position.
- Retirement life of critical components (Source: Aquilla Maintenance Manual):
Replace the following components at the hours or landings (whichever comes first) as indicated. After the first 1000 hours and at every 500 hours, thereafter, the entire undercarriage must be stripped down and inspected. If components are corroded, the replacement period must be shortened by 50%, and all bolts and nuts must be replaced as soon as excessive corrosion is noticed.
- The aircraft maintenance manual states that the engine mounting bracket’s life span is 1500 hours, and the trike had been flown a total of 451.5 hours since new, which was well within the limit by 1048.5 hours. The investigation could not determine how many landings the aircraft carried out as they were not recorded in the flight folio serial number 41, 42, 43 up to and including 44.
- The investigator reviewed the maintenance records of the engine. At this stage of the investigation, no adverse findings have been found.
- The AIID investigator has collaborated with the manufacturer, the SACAA and other organisations involved in areas of interest (including flight operations, human performance, maintenance procedures and aircraft systems) in this investigation, which is on-going. The investigator will be looking into other aspects of this occurrence which may or may not have safety implications.

**This Report is issued by:
Accident and Incident Investigation Division
South African Civil Aviation Authority
Republic of South Africa**