

INTERIM STATEMENT ACCIDENT

Incident and Incident Investigations Division

Accident
- Interim Statement -
AIID Ref No: CA18/2/3/10100



Figure 1: Air Tractor AT-502A, ZS-XPC.

Description:

On Saturday morning, 8 January 2022, a pilot on-board the Air Tractor AT-502A aircraft with registration ZS-XPC took off on a crop-spraying operation from a private farm in Elandsfontein, Gauteng province. Meanwhile, there was another person who was taking a video recording of the crop-spraying operation. The person was positioned in line with the spray line of the aircraft, approximately 100 metres (m) from where the maize field ends. As the pilot banked to the left to position the aircraft for the next spray run, the left-wing tip of the aircraft struck the left leg and the upper left arm of the person taking a video. The farmer rushed the person to the hospital in Potchefstroom.

The flight was conducted under the provisions of Part 137 of the Civil Aviation Regulations (CAR) 2011 as amended.

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 CA18/2/3/10100 that was published on 27 January 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 the AIID had assigned an accident Investigation File Number CA18/2/3/10100 to this investigation.

The AIID appointed the investigating team led by the investigator-in-charge (IIC). The investigators 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

On Saturday morning, 8 January 2022, a pilot on-board an Air Tractor AT-502A aircraft with registration ZS-XPC took off on a crop-spraying operation from a private farm in Elandsfontein, Gauteng province. Meanwhile, there was another person positioned in line with the spray line of the aircraft who was recording the crop-spraying operation, approximately 100 metres (m) from where the maize field ends. As the pilot banked to the left to position the aircraft for the next spray run, the left-wing tip of the aircraft struck the left leg and upper left arm of the person taking a video. The person was seriously injured and was rushed to the hospital in Potchefstroom by the farmer.

Since the release of the preliminary report on 27 January 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.

Moreover, the investigator has reviewed the maintenance records of the engine. At this stage of the investigation, there are no adverse findings in the maintenance records.

The following findings have been established thus far:

- The pilot stated that he did not see the people in his line of sight.
- The pilot did not give the farmer and his family a safety briefing when the aircraft was still on the ground.
- Fine weather conditions prevailed at the time of the flight; the weather was not considered a factor to this accident.
- The person who was on the ground taking a video of the flight was seriously injured when the left-wing tip of the aircraft struck his left leg below his knee and his left upper arm as the pilot banked to the left.
- The person was admitted to hospital in Potchefstroom where he underwent a surgical procedure on his left leg.

Safety Recommendations

- There has been several crop-spraying/agricultural related accidents in South Africa in recent months. During these investigations, the AIID has noted that not all operations are conducted under the auspice of an air operating certificate (AOC). It was further noted that even if such operations were conducted under the auspice of an AOC, inadequate supervision on the safety of the operation was identified as a significant contributory factor due to absence of safety officers/managers, as well as absence of SACAA officials overseeing the operations.

It is recommended to the Director of Civil Aviation that the authority increase surveillance regarding crop-spraying operations. It is a known that crop-spraying is a high-risk flying

operation that is conducted over large parts of the country with a variety of aircraft types, which include type-certified as well as non-type certified aircraft (NTCA).

The AIID investigator has collaborated with the state of 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**