



Ref: 7627

## SOUTH AFRICAN CIVIL AVIATION AUTHORITY

### ACCIDENT REPORT – EXECUTIVE SUMMARY

|   |                                       |                              |                          |                             |         |
|---|---------------------------------------|------------------------------|--------------------------|-----------------------------|---------|
| <b>Aircraft Registration</b>  | <b>ZS-KXG</b>                         | <b>Date of Accident</b>      | 11/2/2003                | <b>Time of Accident</b>     | 0845Z   |
| <b>Type of Aircraft</b>   | CESSNA T188C                          |                              | <b>Type of Operation</b> | Agricultural Spraying       |         |
| <b>Pilot-in-command License Type</b>  | Commercial                            | <b>Age</b>                   | 57                       | <b>License Valid</b>        | Yes     |
| <b>Pilot-in-command Flying Experience</b>   | Total Flying Hours                    | 10 236.9                     |                          | Hours on Type               | 9 709.9 |
| <b>Last point of departure</b>  | Farm Goedehoop in the Bethal District |                              |                          |                             |         |
| <b>Next point of intended landing</b>   | Farm Goedehoop in the Bethal District |                              |                          |                             |         |
| <b>Location of the accident site with reference to easily defined geographical points (GPS readings if possible)</b>  |                                       |                              |                          |                             |         |
| Farm Goedehoop in the Bethal District   |                                       |                              |                          |                             |         |
| <b>Meteorological Information</b>   | Fine                                  |                              |                          |                             |         |
| <b>Number of people on board</b>  | 1                                     | <b>No. of people injured</b> | 0                        | <b>No. of people killed</b> | 0       |
| <b>Synopsis</b>   |                                       |                              |                          |                             |         |
| <p>The pilot was engaged in a crop spraying detail from approximately 0630Z the morning. During an attempt to become airborne after uplifting his 5<sup>th</sup> load for the morning. On reaching the point where the tail should have come up, the aircraft did not respond accordingly.</p> <p>Looking at his instruments, he noted a reduced manifold pressure of 32 inches, 7 inches below the normal manifold pressure setting. He then realized that he would not be able to become airborne on the remaining runway available. He elected to dump the load and still could not clear the fence, which resulted in the right-hand wing colliding with a railway post, which was used as a fence post. On impact with the fence the propeller attachments failed and the propeller departed the aircraft.</p> <p>The aircraft came to rest in an open field approximately 100m past the fence, causing substantial damage to the landing gear and fuselage.</p> |                                       |                              |                          |                             |         |
| <b>Probable Cause</b>   |                                       |                              |                          |                             |         |
| <p>The reduction in engine power shortly after take-off could be attributed to an unserviceable mechanical fuel pump, which was found to have been leaking fuel between the aneroid and impeller chambers, caused by a faulty seal, rendering an inconsistent fuel supply to the engine. The aircraft was unable to gain altitude and a forced landing followed.</p>  |                                       |                              |                          |                             |         |