



Ref: 7079

SOUTH AFRICAN CIVIL AVIATION AUTHORITY**ACCIDENT REPORT – EXECUTIVE SUMMARY**

Date of Accident	3 August 1999	Time of Accident	1400Z
Aircraft Registration	ZS-LZE	Type of Aircraft	Ayres S2R-T34
Pilot-in-command Licence Type	Commercial	Licence Valid	Yes
Pilot-in-command Flying Experience	Total Flying Hours	*Unknown	Total Hours on Type At least 47.3
Type of Operation	Fire Fighting		
Last point of departure	Nelspruit		
Next point of intended landing	Nelspruit		

Location of the accident site with reference to easily defined geographical points (plus GPS readings if possible)

Bhunya Area, Swaziland

Main wreckage at S26° 36.026' E030° 56.475' and L/H wing tip at S26° 35.754' E030° 56.403'

Meteorological Information		Fine weather conditions prevailed at the time of the accident with moderate wind. However, the air was filled with heavy smoke in the immediate area of the accident site.			
Number of people on board	1	No. of people injured	0	No. of people killed	1

Synopsis

The pilot was the holder of a valid Commercial Pilots' licence and the aircraft type was endorsed onto his licence.

Fine weather conditions prevailed at the time of the accident. However, visibility was greatly reduced due to very dense smoke as a result of a forest fire.

The aircraft was involved in a fire fighting operation in the Bhunya Area in Swaziland and was tasked to drop several loads of water on the head of a fire raging in a Pine Plantation.

The pilot was too high on the first approach, but with the second approach he dropped the water load on the target. However, according to another pilot the aircraft pitched up severely after releasing the load and then entered into a type of maneuver similar to a spin and crashed just over the hill from the area where the load had been released. The post-impact fire destroyed the aircraft after the accident.

During the on-site investigation on 8 November 1999, with the Swaziland DCA and the SACAA investigators present, the left-hand wing tip was discovered on the ground in the area where the water load was released. A large piece (approximately 1½m x ¾m), of the upper L/H wing skin, was also located on top of a pine tree, in the same area.

During the investigation by the SACAA investigators, various pieces of paint flakes and small pieces of debris were located by the CAA investigators along the flight path (Approximately 120°M), which indicated that the L/H wing tip failed during flight.

Probable Cause

The left-hand wing tip failed, as a result of an overload or possibly as a result of a stress-overload.