

**AAIB Bulletin No:** 11/94

**Ref:** EW/G94/08/11

**Category:** 1.3

**Aircraft Type and Registration:** Sportavia RF5B Sperber, G-SSWV

**No & Type of Engines:** 1 Limbach L 2000 EO piston engine

**Year of Manufacture:** 1973

**Date & Time (UTC):** 18 August 1994 at 1715 hrs

**Location:** Camphill Airfield, Derbyshire

**Type of Flight:** Private

**Persons on Board:** Crew - 1                      Passengers - 1

**Injuries:** Crew - None                      Passengers - None

**Nature of Damage:** Damage to landing gear, fuselage, propeller and right wing

**Commander's Licence:** Private Pilot's Licence

**Commander's Age:** 54 years

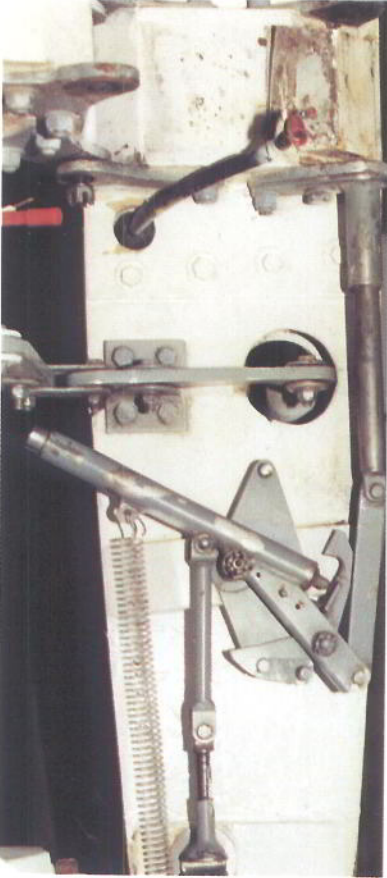
**Commander's Flying Experience:** 210 hours (of which 31 were on type)  
Last 90 days - 5 hours  
Last 28 days - 5 hours

**Information Source:** Aircraft Accident Report Form submitted by the pilot

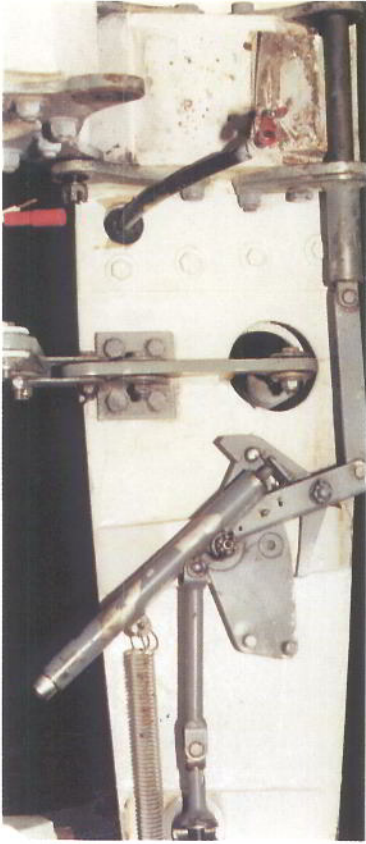
The aircraft was about to depart for a local flight. It had been brought out of its hangar, and given a pre-flight inspection, during which the wingtips were unfolded and apparently locked in the flight position. The wing joint fairings were also fitted. Normal pre-flight checks were then carried out, and the take-off run commenced. As lift-off speed was approached, it became apparent to the pilot that the aircraft had an overwhelming tendency to turn to the right, despite application of opposite rudder. Simultaneously, the pilot became aware that the outer section of the right wing had lifted to the vertical. He immediately closed the throttle and abandoned the takeoff. The aircraft continued to the right and made a ground loop, the nose pitched down and the propeller struck the ground. The aircraft came to rest upright but the mainwheel had gone backwards over centre.

The pilot subsequently found that the right wingtip was unlocked. He had understood that it was not possible to fit the wing joint fairing in position if the locking mechanism was not fully in the locked position.

Photographs of the mechanism were provided by the repair company, and indicate the locking mechanism in both the unlocked (Fig.1) and locked (Fig.2) positions (viewed from outboard looking towards the wing root). The same view of the wing joint fairing is shown unlocked (Fig.3) and correctly locked (Fig.4). When the wing is in the correctly locked position, the tip of the locking handle should protrude slightly above the surface of the fairing through the slot. The view from the cockpit in the correct locked condition is shown in Fig.5. No defects were found in the locking mechanism.



**FIG.1 WING JOINT MECHANISM UNLOCKED**



**FIG.2 WING JOINT MECHANISM LOCKED**



**FIG.3 WING JOINT FAIRING UNLOCKED**



**FIG.4 WING JOINT FAIRING LOCKED**



**FIG.5 COCKPIT VIEW - CORRECTLY LOCKED**