

No: 9/84

Ref: EW/G84/06/05

Aircraft type and registration: Cessna 340A—111 G-MLBY (Light twin engine, fixed wing aircraft)

Year of manufacture: 1980

Date and time (GMT): 14 June 1984 at 1245 hrs

Location: Alexandria Airport, Egypt

Type of flight: Ferry

Persons on board: Crew — 2 Passengers — Nil

Injuries: Crew — None Passengers — N/A

Nature of damage: Substantial damage to aircraft nose, right engine, right wing and both propellers

Commander's Licence: Private Pilot's Licence

Commander's Age: N/K

Commander's total flying experience: 3,000 hours (of which 172 hours were on type)

Information Source: Accident Report Pro forma completed by pilot.

On 14 June the aircraft, having been accepted as serviceable by the two crewmembers, departed Khartoum for Luxor, as part of a ferry flight from Johannesburg to the United Kingdom. This flight was uneventful, as was the subsequent departure from Luxor and en-route flight to Alexandria. During the approach to Alexandria, the undercarriage and 15 degrees of flap were lowered at a height of 4000ft and a speed of 140 kt. Positive indication of the undercarriage being down and locked was noted from the three green lights. A further check on the undercarriage indication was made during base leg, when 30 degrees of flap was selected, with yet another check when the aircraft was on final approach. A normal touchdown was made on Runway 36 with a reported wind of 320°/15 kt and a temperature of 25°C.

The landing roll was normal for the first 100 metres, following which the aircraft displayed a tendency to turn to the right. Suspecting that the right hand tyre had become deflated, the pilot braked hard in an attempt to slow the aircraft. It then became apparent that the right main undercarriage was collapsing: full left rudder and braking was applied, but the aircraft continued to veer to the right before striking a runway light installation and coming to rest in a mound of sand. The systems were shut down and the crew evacuated the aircraft without injury. There was no fire and the airfield emergency services arrived in approximately 7 minutes.

When the right undercarriage was lowered during subsequent investigations, it was observed that the sidestay would not complete the full "over centre" movement necessary to achieve an effective downlock. It was concluded that the reason for this was an excessively stiff bolt which acts as a pivot for the two sidestay halves. Cockpit indication of the condition would not necessarily have been given, as the appropriate microswitch is attached to an adjacent part of the undercarriage linkage, as opposed to being mounted on the sidestay itself.

The aircraft had been issued with a South African Certificate of Safety on 28 February 1984, and new undercarriage sidestay bushes had been fitted at this time. Although the Certificate was valid for a year in South Africa, the United Kingdom Civil Aviation Authority had granted a temporary Certificate of Airworthiness for the purpose of the ferry flight, conditional upon the issue of a Certificate of Fitness for flight. This latter Certificate was not issued although it is believed that the necessary inspections and test flights were carried out.

The aircraft had been transferred to the British register prior to the ferry flight. This was not however reflected in the aircraft log books, which bore the original South African registration.