

Aircraft type and registration: NDN 1T Firecracker G-SFTR (light single engined fixed wing aircraft)

Year of Manufacture: 1983

Date and time (GMT): 21 January 1985 at 1745 hrs

Location: Carlisle Airfield

Type of flight: Training

Persons on board: Crew — 2 Passengers — None

Injuries: Crew — None Passengers — None

Nature of damage: Slight damage to undercarriage and underside of aircraft

Commander's Licence: Airline Transport Pilot's Licence with instrument and full instructors rating

Commander's Age: 45 years

Commander's total flying experience: 5883 hours (of which 525 were on type)

Information Source: Aircraft Accident Report Form submitted by pilot

After take-off the undercarriage was selected up. The three green lights went out and the red undercarriage unlocked light came on. The aircraft was levelled at 1000 feet and then yawed in an attempt to lock the undercarriage up. This manoeuvre failed to change the situation. The undercarriage was then selected down but there was no change in the cockpit indications and no physical indication to the pilot that the undercarriage had locked down. A number of undercarriage re-selections were made but no change in the indications took place. Visual inspection by another aircraft revealed that the main undercarriage was down but the nose undercarriage was 30 degrees from the vertical. Further manoeuvres were undertaken but there was no change in the situation. The drill for the emergency lowering of the undercarriage was carried out but the undercarriage unlocked light remained illuminated.

During this time Air Traffic Control had been made aware of the problem and the aircraft had remained in the proximity of the airfield. An approach and landing was made and upon touchdown the right main undercarriage started to collapse. The aircraft eventually left the runway and slowed to a halt some distance from the runway.

Subsequent examination of the aircraft showed that the undercarriage pump motor had failed electrically and the emergency system air bottle was empty. The emergency system air bottle was a prefilled disposable capsule and when a new one was fitted a leak was found at the airframe/bottle seal. Further tightening of the air bottle in the housing cured the leak.