

AAIB Bulletin No: 11/94

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Category: 1.3

Aircraft Type and Registration: Siai Marchetti 260, N407FD

No & Type of Engines: 1 Lycoming O-540 E4A5 piston engine

Year of Manufacture: 1990

Date & Time (UTC): 28 August 1994 at 0915 hrs

Location: Newcastle Airport

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - 2

Injuries: Crew - None Passengers - None

Nature of Damage: Damaged aerals, abrasions to the underside of the fuselage and bent propeller

Commander's Licence: Commercial Pilot's Licence (USA)

Commander's Age: 42 years

Commander's Flying Experience: 3,200 hours (of which 12 were on type)
Last 90 days - 210 hours
Last 28 days - 82 hours

Information Source: Aircraft Accident Report Form submitted by the pilot plus telephone enquiries

Normal pre-flight actions including fuel checks were performed. The tip tanks were empty and so the engine was started using fuel from the right main tank; this selection was retained for takeoff. Power checks were carried out before entering the runway at the 'Hold C' intersection. The pilot decided to use the full length of the runway (2,332 metres) and backtracked to the threshold of Runway 25. Because of the long taxi distance, engine power was checked again just before takeoff including the application of carburettor heat. Normal power indications were obtained during the take-off roll and the aircraft became airborne. At about 100 feet agl the landing gear was retracted but shortly afterwards the engine lost power. On briefly checking that the fuel and its booster pump were still selected 'ON', the pilot landed back on the runway. There was insufficient time to extend the electrically operated landing gear and the aircraft ran along the tarmac on its belly for some 300 metres. The airport's emergency services attended the aircraft promptly but there was no fire and no injuries to any of the occupants.

The weather at the time was: wind 240°/18 kt; visibility 40 km; cloud scattered at 2,500 feet; temperature 12°C; dewpoint 8°C; QNH 1002 mb. According to the CAA's Safety Sense Leaflet 14 (Piston Engine Icing) these conditions are conducive to serious icing at any power setting. However, given the short period of time between the application of carburettor heat followed by obtaining full power on takeoff, and the sudden loss of power seconds later, carburettor icing is unlikely to have been a causal factor.

The owner (who was not the pilot) stated that he had flown the aircraft for some 32 hours since acquiring it without any problems. After making enquiries he discovered that it had suffered unexplained engine failures at least twice before yet there were no corresponding entries in the aircraft's logbooks. One of these failures occurred whilst the aircraft was being ferried across the Atlantic Ocean and the aircraft lost some 8,000 feet of altitude before the ferry pilot was able to re-start the engine; thereafter it ran sweetly for the remainder of the flight.

Flow checks on the aircraft's fuel system have not revealed any obstructions and no faults have been found in the ignition system. The engine and its carburettor have been removed for overhaul as precautionary measures. If the fault is eventually traced, the results will be published in a later AAIB Bulletin.