Stolp Starduster T00 SA300, G-UINN

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Aircraft Type and Registration: Stolp Starduster T00 SA300, G-UINN No & Type of Engines: 1 Lycoming O-360-A4A piston engine

Year of Manufacture: 1980

Date & Time (UTC): 19 July 1998 at 1445 hrs

Location: Archerfield Airstrip, Lothian

Type of Flight: Air display

Persons on Board: Crew - 1 - Passengers - None
Injuries: Crew - None - Passengers - N/A
Nature of Damage: Substantial airframe damage

Commander's Licence: Airline Transport Pilot's Licence with Instructor Rating

Commander's Age: 49 years

Commander's Flying Experience: 9,300 hours (of which 280 were on type)

Last 90 days - 130 hours

Last 28 days - 40 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The aircraft took off from Archerfield at 1415 hrs (local) to perform a display at nearby East Fortune Airfield (Museum of Flight). During his pre-flight checks, the pilot had assessed the fuel contents of the fuselage tank to be 12 imperial gallons (the tank in the upper wing centre section being empty) and had drawn fuel from the drain and the gascolator. Following an uneventful display, the aircraft returned to Archerfield at 1439 hrs and carried out two missed approaches satisfactorily, but on positioning downwind for the next approach the engine cut. However, when the aircraft was then turned into wind, the engine recovered. Carburettor heat had already been selected, and the fuel and magnetos were checked 'ON'. The engine cut again, but then recovered once more. The pilot transmitted a Mayday call, which was received by another aircraft that was taking part in the display. When the engine cut for a third time, the pilot selected a field in which to make an emergency landing. Although the engine again picked up during the landing flare, the pilot closed the throttle and landed into a standing crop of barley. He had time to tighten his harness before the aircraft nosed over in the crop, as he had expected, and he was able to evacuate the aircraft without injury.

According to the aircraft owner, the fire services drained an estimated 8 gallons of fuel from the aircraft after the accident. A detailed inspection of the fuel system has not yet been carried out, and probably will not be conducted until the aircraft is rebuilt during the coming winter. Despite the reported application of carburretor heat, the owner considered that carburettor icing may have been the cause of the engine problem. The relevant weather details at the time of the accident were given as: temperature 12°C, dew point 13°C and light rain. Reference to a carburettor icing chart indicated that such conditions are conducive to 'serious icing, any power setting'.

Any relevant information received during the rebuilding of the aircraft will be published in a future edition of the AAIB Bulletin.