Slingsby T61C, G-AZPC, 25 March 1996

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Aircraft Type and Registration: Slingsby T61C, G-AZPC

No & Type of Engines:1 Stark-Stamo MS 1500/2 piston engine

Year of Manufacture:1972

Date & Time (UTC):25 March 1996 at 1235 hrs

Location: Blackmill Airstrip, Feshiebridge, Inverness

Type of Flight: Private (Training)

Persons on Board: Crew - 1 Passengers - 1

Injuries: Crew - None Passengers - None

Nature of Damage: Substantial to propeller, main wheel and both wing leading edges

Commander's Licence: Private Pilot's Licence with FI rating on SLMGs

Commander's Age:53 years

Commander's Flying Experience:464 hours powered flight (of which 356 were on type), and 5,000hours gliding

Last 90 days - 9 hours

Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The student pilot was undergoing his first training flight fora 'silver conversion' to a SLMG (Self Launch Motor Glider). Theweather was fine with good visibility, a wind of 230°/10kt to 15 kt and a temperature of 10°C. The grass runwaysurface however was covered with 1/2 inch of snow.

The flight was preceded by a lengthy pre-flight inspection andengine run-up whilst the instructor explained the start-up proceduresand power checks. Instrument indications during start showedthat the oil temperature and pressure were normal and that thestatic full power was 2650 RPM. Carburettor heat was checkedand was fully functional. The fuel used was four star Mogas.

Full power was achieved as the aircraft started its takeoff runfrom grass Runway 22. The aircraft took off normally and washeld level until a speed of 45 kt was attained. At approximately50 to 100 feet engine power reduced rapidly and the aircraftstarted to descend. By this time the aircraft

was close to theupwind end of the runway with dense forest ahead and to the left. With no time to investigate the power failure the instructorlevelled the wings and manoeuvred the aircraft to the right towardsa wide rocky river bed, the only flat area available. As theaircraft touched down the right wing tip hit the uneven surfaceslewing the aircraft to one side and quickly bringing it to astop. The instructor and student, who were both wearing fullharnesses, were uninjured.

Subsequent testing of the engine by a repair agency did not revealany faults. Results of further tests on the fuel lines, fuelpump and carburettor are not yet available. The instructor reportedthat carburettor icing was a probable cause of the power failurealthough he believes that this would not have caused such an instantaneousloss of power.

An aftercast obtained from the Meteorological Office, Bracknell,shows that the recorded temperature conditions on the surface,in the Feshiebridge area, at the time of the accident were temperature+2°C dewpoint -3°C.

General Aviation Safety Sense Leaflet No 3A, published by theCivil Aviation Authority, entitled 'Winter Flying' includes achart that details the effects of temperature and dewpoint oncarburettor icing. Close to a 'wet' surface, as in this case,high humidity levels must be assumed. This would have put theconditions on the day of the accident in that area of the chartdepicting 'Serious Carburettor Icing' at all power settings.