Reims Cessna F150M, G-BCUJ, 24 May 1997

AAIB Bulletin No: 8/97 Ref: EW/G97/05/14 Category: 1.3

Aircraft Type and Registration: Reims Cessna F150M, G-BCUJ

No & Type of Engines: 1 Continental O-200-A piston engine

Year of Manufacture: 1975

Date & Time (UTC): 24 May 1997 at 1350 hrs

Location: Full Sutton Airfield, Near York

Type of Flight: Private (Training)

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage:

Damage to windscreen, engine mount, fin and rudder, nose

landing gear and wing leading edges

Commander's Licence: Student Pilot

Commander's Age: 56 years

Commander's Flying Experience: 41 hours (all on type)

Last 90 days - 41 hours

Last 28 days - 15 hours

Information Source: Aircraft Accident Report Form submitted by the pilot and

subsequent telephone inquiries

The student pilot was returning to Full Sutton on the completion of a solo cross-country detail. On short finals, with 20° flap selected he felt he was somewhat low and, at about 100 metres from the grass runway, applied power to adjust his rate of descent. The engine did not respond but he felt he might still just makethe runway. However, the aircraft suddenly stopped and flipped onto its back, having landed several metres short of the grasson recently ploughed soft earth. The pilot was uninjured and evacuated the aircraft with the assistance of some agricultural workers.

The pilot's instructor was watching his student's landing andsaw the aircraft apparently encounter an area of sink. Expectingto hear an increase in power, he instead saw the propeller stopcompletely and witnessed the subsequent accident. In a telephoneconversation with AAIB, the instructor indicated that he did notfeel that the engine failure could have been due to carburettoricing, since he did not believe that the weather conditions were conducive to such a phenomenon. Also, in his

opinion, his studentwas quite meticulous about his checks and he was sure that carburettorheat would have been applied at the appropriate times. He taughtthat hot air should be selected after turning downwind and remainselected until very late finals when it should be de-selected as go-around.

AAIB then contacted the student pilot who advised that he hadnot done a circuit upon arrival, but had opted for a straight-inapproach from several miles out, gradually descending at moderate-to-slowspeed. When asked about his handling of the carburettor heatcontrols, he said that he had applied hot air about three timesduring the flight but felt that this was deselected at about twomiles out on long finals. It would appear that, in the absence of the routine imposed by circuit flying, he had regarded thelong, shallow approach as subject only to the normal en-routeapplications of carburettor heat

Enquiries with the Meteorological Office showed that the weatherconditions at the time, with a temperature of $+12^{\circ}$ C and adewpoint of $+2^{\circ}$ C, meant that the aircraft ran a serious risk of carburettor icing at descent power. The organisation repairing the aircraft advised that they have subsequently run the enginewithout any problems, although they did notice that the lowerset of spark plugs appeared somewhat fouled with oil immediately after the accident.