

No: 9/86

Ref: 1b

Aircraft type and registration: Sopwith Pup Replica G-BIAT

No & Type of engines: 1 le Rhone rotary piston engine

Year of Manufacture: 1986

Date and time (UTC): 2 July 1986 at 2010 hrs

Location: Old Warden Aerodrome, Nr Biggleswade, Beds

Type of flight: Initial Test Flight

Persons on board: Crew — 1 Passengers — None

Injuries: Crew — 1 (minor) Passengers — N/A

Nature of damage: Aircraft effectively destroyed

Commander's Licence: Airline Transport Pilot's Licence

Commander's Age: 67 years

Commander's Total Flying Experience: 15000 hours (of which 3½ were on type)

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

The pilot regularly flew aircraft belonging to the Shuttleworth Collection and had flown their Sopwith Pup for approximately 30 sorties. The accident aircraft was being flown on its initial test flight following its construction. Prior to the flight some engine runs were carried out and after some adjustments, which included a jet in the fuel control unit being changed, the pilot conducted a final engine run and assessed the aircraft fit for the flight.

The handling of the aircraft during the take-off was normal but on becoming airborne the pilot noted that there was an out-of-trim in pitch requiring 4 to 5 lbs forward stick force to be applied for the climb. The aircraft was levelled at approximately 1000 feet and for 5 minutes the pilot orbited the airfield while experimenting with the engine controls to produce different power settings. A descent power of 1050 rpm was set and the pilot carried out descending turns prior to landing. During the turn onto the downwind leg for the south west runway the engine lost power. The pilot then attempted to regain engine power by adjusting the engine controls to clear what he thought may have been a rich cut. There was no response from the engine. During this time the pilot's attention had been in the cockpit. Upon looking up the pilot saw that he quickly needed to execute a turn to the left if he was going to land on the airfield. Once the pilot had committed himself to landing on the airfield and started the left turn he realised that he had not maintained sufficient forward pressure on the stick to counteract the nose-up out-of-trim condition and the airspeed was marginal unless the engine regained power. The engine remained in the failed condition and the aircraft stalled onto the ground.

Due to the damage caused to the engine it could not be test run. A detailed examination could not show any positive cause for the engine failure although when the spark plugs were removed they

were found to be serviceable but heavily oil contaminated.