

Yak-18A, RA01370

AAIB Bulletin No: 9/2001 **Ref:** EW/G2001/05/25 **Category:** 1.1

Aircraft Type and Registration: Yak-18A, RA01370

No & Type of Engines: 1 Ivchenko M14P piston engine

Year of Manufacture: 1979

Date & Time (UTC): 24 May 2001 at 1822 hrs

Location: 1 mile south-west of Old Sarum Aerodrome, Wiltshire

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew 1 (Minor) - Passengers - N/A

Nature of Damage: Aircraft substantially damaged

Commander's Licence: FLA Russia

Commander's Age: 43 years

Commander's Flying Experience: 168 hours (of which 111 were on type)

Last 90 days - 6 hours

Last 28 days - 4 hours

Information Source: Aircraft Accident Report Form submitted by the pilot

The owner pilot flew the aircraft from Old Sarum to Lincoln Wickenby airfield. It was his first flight in the aircraft since an engine change, which had taken place approximately one month earlier. The weather was good with light winds from 060° at 5kt with no significant weather or cloud but visibility reduced to 8km in haze. At Wickenby, the pilot refuelled the aircraft filling both wing tanks giving a total fuel on board of 180 litres. Fuel consumption was given as 42 litres per hour. The pilot confirmed by telephone with Old Sarum that the weather was suitable for his intended flight and carried out the normal pre take-off checks. The engine was running normally

with the radio working and reception estimated by the tower as 'strength four'. The aircraft departed Wickenby at 1450 hrs with just the pilot on board. Some 45 to 50 minutes after departure, the engine "missed a beat". This was followed by 15 minutes or so of normal running. At that stage the pilot was not concerned but climbed from 2,000 feet to 3,000 feet as a precaution and continued the flight at 210 kph IAS with all engine indications normal and over 120 litres of fuel remaining. At that point the pilot realised that his radio was not transmitting although he could still receive. Some 15 minutes after the first missed beat the engine missed again followed some minutes later by two missed beats. The pilot increased power from the normal cruise setting of 60-66% to 70% and continued the flight to Old Sarum. With some ten minutes of flying time remaining to his destination the aircraft passed Thruxton airfield to the south. Shortly after this and still at 3,000 feet, the engine began to cough violently and continuously. It was apparent to the pilot that he would need to land quickly and that Thruxton and Old Sarum were probably the same flying time away. Boscombe Down was the nearest airfield but with his radio not transmitting and Old Sarum only 5 miles to the south west he elected to continue to Old Sarum.

The pilot intended to maintain his altitude until overhead Old Sarum, and then make a right descending turn to land on Runway 06. Due to his high workload and the haze he flew beyond the airfield and had to turn back, approaching from the south. On sighting the runway the pilot lowered the flaps and landing gear but was still at about 500 feet as he passed over the runway threshold. At that point the engine was coughing continuously but some power was still available. Given the seriousness of the situation the pilot did consider a landing on Runway 06 from but from his position he knew it would result in a serious overrun and so he continued the right turn to reposition for the runway. Shortly after the turn was commenced and at about one mile south west of Runway 06 with height estimated at about 200 feet, the engine stopped completely. The only possible landing area was a field which the pilot had noticed earlier which was sloping and rough but was clear of the built up area. Although high, the pilot managed to touch down heavily and fast in the field, the aircraft rolled a short distance and then flipped over onto its back. The pilot broke a window and exited the aircraft with minor injuries. He later switched off the fuel and ignition before being taken to hospital by ambulance. The emergency services attended the scene within seven minutes of the accident.

Whilst no conclusive reason for the engine failure could be identified, the pilot thought that the sound was that of fuel starvation. There was however plenty of fuel remaining in the wing tanks.