Safety Regulation Group
Safety Information and Data Department

# Follow-up Action on Occurrence Report

***ACCIDENT TO L39ZO ALBATROS, G-OTAF, 3NM SOUTH OF DUXFORD ON 2 AUGUST 2003***
**(AIRCRAFT CRASH LANDED AFTER ENGINE FAILURE)**

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| **CAA FACTOR NUMBER** | : | F6/2005 |
| **FACTOR PUBLICATION DATE** | : | 15 March 2005 |
| **OPERATOR** | : | Private |
| **CAA OCCURRENCE NUMBER** | : | 2003/05154 |
| **AAIB REPORT** | : | Bulletin 2/2005 |

**SYNOPSIS**

(From AAIB Report)

The pilot had already completed one uneventful flight during the morning. The accident occurred on his second flight whilst rejoining the circuit at Duxford. The weather was CAVOK (no cloud below 5,000 feet, visibility of 10 km or more and no significant weather) and the surface wind was light. The pilot intended to carry out a 'run and break', flying parallel to the runway slightly offset to the north before turning crosswind to join downwind for a landing on Runway 24. The fuel level indicated 450 kg and the minimum recommended downwind fuel state is 300 kg. When it entered the circuit the aircraft was at 220 KIAS with a power setting of 85% RPM. As the pilot began to turn crosswind he retarded the throttle to IDLE and extended the speed brakes. After the airspeed had reduced through 180 KIAS he lowered the landing gear and advanced the throttle to a position that would normally result in about 90% RPM - the normal power setting for maintaining the appropriate speed with the gear down. At this point the speed was at approximately 175 KIAS so the pilot decided to leave the speed brakes extended until the aircraft had slowed to the maximum speed for flap extension of 165 KIAS.

The pilot then reported noticing a "change in the usual sound" of the engine. At this time the aircraft was descending through 850 feet agl (circuit height was 1,000 feet agl) so he instinctively applied full throttle. The engine did not accelerate and the pilot reported that it became apparent to him that the engine had failed or flamed out. He made a MAYDAY call to Duxford ATC and advised them of the problem. The pilot's attention was focused outside the aircraft and therefore he was neither sure if any captions had illuminated on the caution warning panel nor was he aware of the engine instrument indications.

The pilot selected the throttle to IDLE to initiate an engine re-light attempt but then he decided against trying to re-start the engine because the aircraft's height was low and he did not think there would be sufficient time to complete the procedure. He then realised that his two remaining options were a forced landing or an ejection. He decided to eject and grasped the ejection handle with both hands and depressed the firing trigger. Before pulling the handle he hesitated and re-considered his decision to eject because the aircraft was now descending rapidly and was very low. The pilot estimated that the aircraft was by then outside the safe ejection envelope and so he decided against ejecting. The aircraft then entered a light pre-stall buffet. The pilot released the ejector seat handle, applied forward pressure to the control stick to prevent a stall, and then committed himself to a forced landing.

He located a recently harvested wheat field and flew towards it. The aircraft touched down firmly but not heavily in the field and then while still travelling at high speed, it passed through a large hedge and came to rest in a second

field consisting of standing wheat. At some point during the landing run the nose gear collapsed but the aircraft remained structurally intact. After it stopped the pilot turned off all the electrical services, opened the canopy, unbuckled his harness and vacated the aircraft unassisted. There was no fire so he returned to the aircraft and inserted the ejector seat safety pins.

The Duxford Airport fire service arrived on the scene within approximately 10 minutes followed shortly by paramedics and the police. A photographer filmed the aircraft on video seconds after the MAYDAY was heard being declared on the radio. In the video the aircraft can be seen to porpoise nose up and down while descending rapidly, before disappearing from view behind a hill in a level pitch attitude. The landing gear appears to be extended and there is no visible plume of vapour or smoke trailing from the aircraft.

**FOLLOW UP ACTION**

The four Safety Recommendations, made by the AAIB following their investigation, are reproduced below, together with the CAA's responses.

**Recommendation 2004-91**

It is recommended that the UK Civil Aviation Authority considers mandating a calendar time limitation between overhauls for Ivchenko AI-25TL engines.

**CAA Response**

The CAA accepts this recommendation to consider the imposition of a calendar time limitation between overhauls for Ivchenko AI-25TL engines. The CAA will assess related data and consult with known owners and operators to determine whether there is a need to define an appropriate calendar time limit, or an acceptable alternative maintenance programme. These actions will be complete by September 2005.

**CAA Status - Open**

**Recommendation 2004-92**

It is recommended that the UK Civil Aviation Authority takes appropriate action to inform owners, operators and maintainers of L-39 type aircraft of the need to check that the Inlet Directing Body (of the high pressure compressor) operates correctly in accordance with Service Bulletin Ivchenko Progress 225000521.

**CAA Response**

The CAA accepts this recommendation. The CAA sent a letter, on the 3rd February 2005, drawing the attention of owners, operators and maintainers of L-39 type aircraft to the need to ensure correct operation of the Inlet Directing Body (of the high pressure compressor) in accordance with Service Bulletin (SB) Ivchenko Progress 225000521. The letter also contained a reminder that the conditions for L-39 Permit Maintenance Release require that aircraft and equipment (which includes engines) be maintained to manufacturers' instructions.

**CAA Status - Closed**

**Recommendation 2004-93**

It is recommended that the UK Civil Aviation Authority emphasises to operators of Permit to Fly aircraft that it is their responsibility to ensure that they possess all published service information and that they regularly check for new service information published by the manufacturer.

**CAA Response**

CAA partially accepts this recommendation.

It should be noted that published manufacturer's service information is not available for all aircraft issued with a Permit to Fly. However, the CAA will publish a Letter to Owners/Operators (LTO) of aircraft issued with a Permit to Fly administered by CAA, and to organisations who are approved in accordance with BCAR Chapter A8-20 that maintain ex-military aircraft, reminding them of their responsibilities to have access to current published service information when undertaking maintenance on an aircraft. In addition the CAA will forward a copy of this LTO to the Popular Flying Association and to the British Microlight Aircraft Association with a request that they bring it to the attention of their members. It is planned to publish this LTO before 31 March 2005.

**CAA Status - Open**

**Recommendation 2004-94**

It is recommended that the UK Civil Aviation Authority emphasises to operators of Permit to Fly aircraft that in situations where service information is only available in a foreign language, it is the operator's responsibility to obtain, if necessary, a translation of the service information into a language that the operator understands.

**CAA Response**

The CAA accepts this recommendation.

Supplement 2 to BCAR Chapter A8-20 paragraph 2.5.1 d) already requires organisations involved in the maintenance of a foreign manufactured ex-military Permit to Fly aircraft to obtain copies of service information and any supporting documentation in the English language.

The CAA will at the next revision to BCAR Section A amend Chapter A3-7 to make similar provisions applicable to other aircraft of foreign origin issued with a Permit to Fly. The next revision of BCAR Section A is planned for June 2005.

In response to Recommendation 2004-93 the CAA is to publish a Letter to Operators (LTO) concerning the availability of service information. The need for service information to be available in the English language will be emphasised in this LTO. It is planned to publish this LTO before 31 March 2005.

**CAA Status - Open**