

# Jabiru UL-450, G-TULL

<b>AAIB Bulletin No:</b> 3/2003	<b>Ref:</b> EW/G2002/08/30	<b>Category:</b> 1.3
<b>Aircraft Type and Registration:</b>	Jabiru UL-450, G-TULL	
<b>No &amp; Type of Engines:</b>	1 Jabiru Aircraft Pty 2200A piston engine	
<b>Year of Manufacture:</b>	2001	
<b>Date &amp; Time (UTC):</b>	30 August 2002 at 1900 hrs	
<b>Location:</b>	Milton-Under-Wychwood, Oxford	
<b>Type of Flight:</b>	Private	
<b>Persons on Board:</b>	Crew - 1	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Fuselage cracked.  Right wing and left landing gear broken.	
<b>Commander's Licence:</b>	Private Pilots Licence	
<b>Commander's Age:</b>	77 years	
<b>Commander's Flying Experience:</b>	285 hours (of which 26 were on type)  Last 90 days - 14 hours  Last 28 days - 9 hours	
<b>Information Sources:</b>	Aircraft Accident Report Form submitted by the pilot, data from the Met Office and enquiries of the PFA and CAA	

## History of flight

The purpose of the flight, flown by the owner, was to practise slow flying with and without flaps followed by a short cross-country. During the descent into the departure airfield the pilot selected carburettor heat which he left selected until he turned the aircraft onto the final approach. The pilot estimated that at about 20 feet agl and 200 yards from the airfield boundary, whilst on the final approach, the engine stopped. At about 10 feet agl and within the airfield boundary, the flaps

retracted and the aircraft dropped towards the ground. The pilot reacted by swiftly pulling back on the control stick which precipitated a stall followed by a hard impact with the ground.

## **Engine**

In the owners opinion the engine failed due to carburettor icing which he had experience on three previous occasions at altitude. On each occasion, he had successfully restarted the engine with the use of carburettor heat. A meteorological aftercast was obtained from the Met Office and when the temperature, dew point and humidity were plotted on a Carburettor Icing Probability Chart, it indicated that serious carburettor icing could occur at descent power.

## **Flaps**

The owner stated that the flaps had retracted on four previous occasions when he was flying the aircraft. All of these uncommanded retractions had occurred whilst flying slowly at altitude.

## **Test flights for the initial issue of the Permit To Fly Certificate**

During the test flights, conducted by the Popular Flying Association (PFA), for the initial issue of the Permit To Fly Certificate, this aircraft suffered both engine failures and uncommanded flap retractions. The idle stop on the carburettor was reset to prevent stalling when the throttle was fully closed and the flap handle pivot bolt adjusted to prevent it jumping out of its detent. The remaining test flights were conducted with no recurrence of the engine failing or the flaps retracting.

## **Other information**

Enquiries of the PFA revealed that there have been a number of reports of uncommanded flap retractions on this aircraft type, the majority of which they considered were due to incorrect adjustment/rigging of the flap operating system.

The CAA had not received any reports of uncommanded flap retractions on this aircraft type.

According to a PFA Inspector and pilot familiar with the aircraft type, approaches have to be flown quite flat in order to keep the airspeed under control and the aircraft tends to float during the landing flare.