

## Piper L21B (Modified), G-BIMM

AAIB Bulletin No: 12/2001 Ref: EW/G2001/10/03 Category: 1.3

<b>Aircraft Type and Registration:</b>	Piper L21B (Modified), G-BIMM	
<b>No &amp; Type of Engines:</b>	1 Lycoming O-320-A2B	
<b>Year of Manufacture:</b>	1955	
<b>Date &amp; Time (UTC):</b>	9 October 2001 at 1300 hrs	
<b>Location:</b>	Clacton Airfield, Essex	
<b>Type of Flight:</b>	Training (tailwheel type conversion )	
<b>Persons on Board:</b>	Crew - 2	Passengers - None
<b>Injuries:</b>	Crew - None	Passengers - N/A
<b>Nature of Damage:</b>	Wing struts, landing gear and propeller	
<b>Commander's Licence:</b>	Basic Commercial Pilot's Licence/Flying Instructor Rating	
<b>Commander's Age:</b>	49 years	
<b>Commander's Flying Experience:</b>	4,100 hours (of which 700 were on type)  Last 90 days - 200 hours  Last 28 days - 40 hours	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and engineering report	

Grass Runway 18 at Clacton is 610 metres long, however the landing threshold is displaced and the landing distance available is 502 metres. A footpath crosses the runway about a third of this distance from the displaced threshold. The surface wind was 230°/12 kt.

The handling pilot held an Airline Transport Pilot's Licence and had a total of 6,800 hours. This was his first flight on type, under the supervision of the Flying Instructor (FI). The upper air work had been completed and he flew a normal circuit to Runway 18.

The FI reported that the approach was flown with flap, at the correct speed, the flare was correct and the aircraft touched down softly on the main wheels. The touch down point was just past the footpath and, after a short ground roll, the aircraft started to swing to the right. The pilot applied

left rudder which appeared to have no effect so the FI intervened and applied left rudder and brake which also had no effect. The aircraft left the runway to the right and went through a boundary hedge. The FI estimated that the speed was only about 10 mph, however there was an 8 foot drop on the other side of the hedge and the aircraft came to rest on the edge of a pond. Both occupants were wearing full upper torso restraint and escaped without injury.

Before the flight the FI had demonstrated the use of the parking brakes. The foot brakes are applied and two 'clips' are positioned to hold the pressures and set the brakes. The parking brakes are released by subsequent depression of the foot brakes when a click is heard as each clip is released. The left brake felt slightly spongy during application and did not seem to release the park brake positively. The brakes were tried several times whilst taxiing and no further problem was experienced. The left wheel brake also appeared to function normally during the initial part of the take-off roll. Post accident engineering investigation revealed that the left brake was inoperative. The 'O' ring on the left calliper was worn and there was evidence that fluid had leaked out around the piston.