

**ACCIDENT**

<b>Aircraft Type and Registration:</b>	Yak-52, G-YAKH	
<b>No &amp; Type of Engines:</b>	1 Ivchenko Vedeneyev M-14P radial piston engine	
<b>Year of Manufacture:</b>	1989	
<b>Date &amp; Time (UTC):</b>	31 May 2010 at 0910 hrs	
<b>Location:</b>	Runway 03, White Waltham Airfield, Berkshire	
<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>	Minor damage to left wing tip, left aileron and tail skid	
<b>Commander's Licence:</b>	Private Pilot's Licence	
<b>Commander's Age:</b>	37 years	
<b>Commander's Flying Experience:</b>	405 hours (of which 81 were on type) Last 90 days - 6 hours Last 28 days - 1 hour	
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot and further enquiries by the AAIB	

**Synopsis**

After landing and turning right off the grass runway the aircraft 'lurched' to the left. The pilot reached for the landing gear selector to ensure that it was DOWN, and in doing so may have inadvertently briefly selected it UP. The left main gear leg retracted, and during recovery the right main gear leg also retracted. Retraction and extension tests of the gear after the incident did not reveal any mechanical faults.

**History of the flight**

The pilot had completed three successful touch-and-go landings. After his fourth landing on Runway 03 (grass) he vacated it to the right and started taxiing towards the fuel pumps. He reduced the engine power

to 40% and retracted the flaps while the aircraft slowed on an upslope. Shortly thereafter he felt a 'lurch' to the left. He looked left and saw the left wing dropping so he pulled the throttle back to IDLE and reached for the landing gear selector; in doing so he believes he may have briefly selected UP before reselecting DOWN. The left wing continued to drop until its wing tip hit the ground, whilst the aircraft was rolling forwards at a walking speed. The pilot shut down the engine, but because the nose gear leg and right main gear leg had remained extended, the propeller did not strike the ground. After he called for assistance some ground handlers arrived and lifted the left wing; this caused the right main gear leg to retract. When the aircraft was

later recovered both main gear legs were extended and locked into place.

### **Examination of the landing gear**

The main landing gear legs on the Yak-52 retract forwards and are operated by a pneumatic system. The landing gear legs do not retract into the fuselage or wings, but remain protruding beneath them, thus protecting the aircraft underside in the event of a gear-up landing, gear collapse or inadvertent UP selection on the ground (Figure 1). The maintenance organisation that recovered the aircraft carried out a number of landing gear extension and retraction tests, and each time all three main landing gear legs locked into the DOWN

position. The main gear downlocks are integral to the actuators and a strip examination of the actuators revealed a small amount of internal corrosion, but it was not deemed sufficient to cause a malfunctioning of the locking mechanism.

### **Pilot's assessment of the cause**

The pilot stated that the aircraft's lurch to the left was very prominent and might have been caused by the left wheel dropping into a hole. Without any evidence of a mechanical fault the pilot concluded that he might have caused the gear to unlock when he reached for the landing gear selector.



**Figure 1**

G-YAKH with its landing gear retracted

*(photograph courtesy CAA G-INFO)*