

Piper PA-15, G-BTOT, 14 January 2001

AAIB Bulletin No: 4/2001 Ref: EW/G2001/01/22 Category: 1.3

Aircraft Type and Registration: Piper PA-15, G-BTOT

No & Type of Engines: 1 Continental 0200-A piston engine

Year of Manufacture: 1955

Date & Time (UTC): 14 January 2001 at 1345 hrs

Location: Fishburn, County Durham

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - None

Injuries: Crew - None - Passengers - N/A

Nature of Damage: Both wings, propeller and starboard undercarriage

Commander's Licence: Private Pilot's Licence

Commander's Age: 40 years

Commander's Flying Experience: 213 hours (of which 10 were on type)
Last 90 days - 1 hour
Last 28 days - 1 hour

Information Source: Aircraft Accident Report Form submitted by the pilot

After flying, the aircraft was parked close to the fuel bowser and refuelled. The aircraft was then pushed away from the bowser and turned through 90° so that the engine could be started in preparation for taxiing to the hangar. The control stick was lashed in the fully aft position and both mainwheels were chocked so that the pilot could start the engine by hand-swinging the propeller without assistance from a second person in the cockpit.

When the start was attempted, the engine was neither hot nor cold and it proved difficult to start. Between successive attempts, the engine controls were manipulated and both priming and 'blowing out' procedures were tried without success. For each attempt to start, the throttle was set about 3/4 inch open, which was the normal practice, with the throttle friction at a 'loose' setting. Eventually the engine fired but it accelerated to an abnormally high speed. The pilot tried to dash around the right wing to reach the throttle but as he did so the left mainwheel rode over its chock. The aircraft swung to the right until it was no longer restrained by the chock beneath the right mainwheel and then it accelerated towards the windsock mast, with the pilot still trying to enter the cockpit.

The aircraft's left wing struck the mast sustaining significant damage to the leading edge. The impact pivoted the aircraft around the mast and accelerated the engine to a higher RPM. At this point the pilot stepped clear of the aircraft but very soon found it coming back towards him. Fortunately the aircraft turned to the left, missing the pilot, but eventually it struck one corner of the fuel bowser with its right wing, propeller and landing gear. The blade strikes penetrated the bowser but there was no fire and the impacts were sufficient to stop the engine rotating. At this time the pilot caught up with the aircraft and succeeded in switching off the aircraft's fuel supply and magnetos. As he did so, he grabbed the cockpit fire extinguisher and noticed that the throttle had moved to a high power setting. The aircraft was later removed to the hangar and temporary repairs to the holes in the bowser were applied.

After the accident, whilst the pilot was copying sections of the aircraft logbooks for his insurers, he discovered a copy of a facsimile message which had been sent to another syndicate member. The message chiefly contained details of appropriate handling speeds but the first line stated that the throttle linkage had a tendency to vibrate towards the full power position unless the throttle friction nut was tight. This latter information had not, apparently, been copied to all syndicate members.

In addition to the tendency for the throttle to self-advance after start, the pilot attributed the accident to two other factors. The ground was soft making it easier for the aircraft to overrun the chocks and he had not expected the engine to start as vigorously as it had done.